FIG. 1

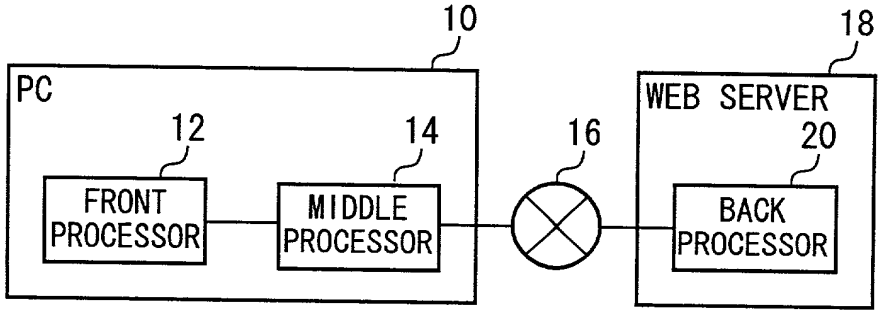


FIG. 2

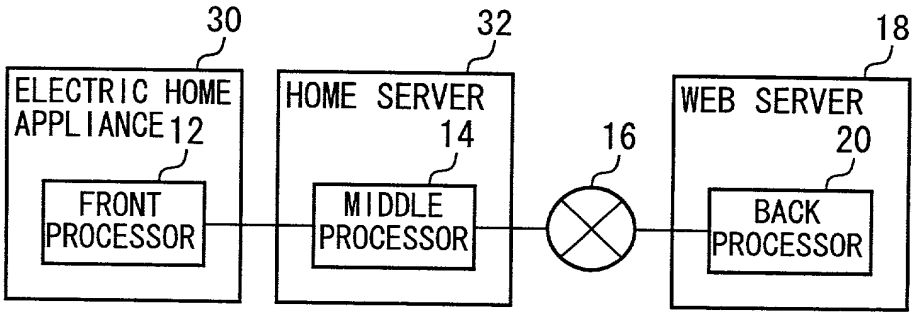


FIG. 3

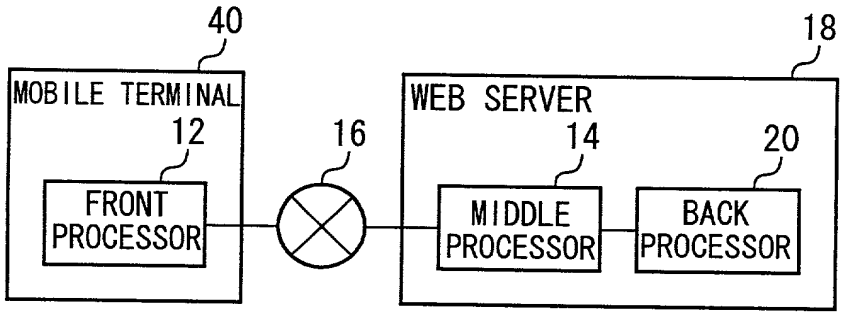
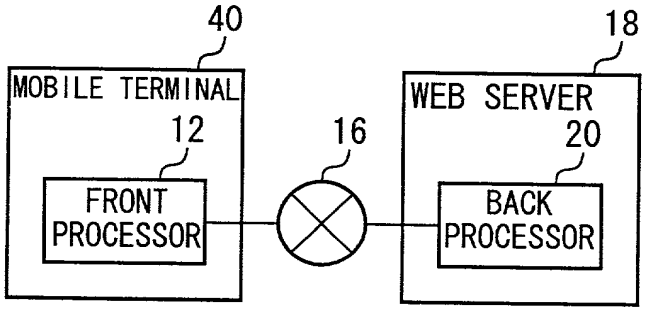


FIG. 4



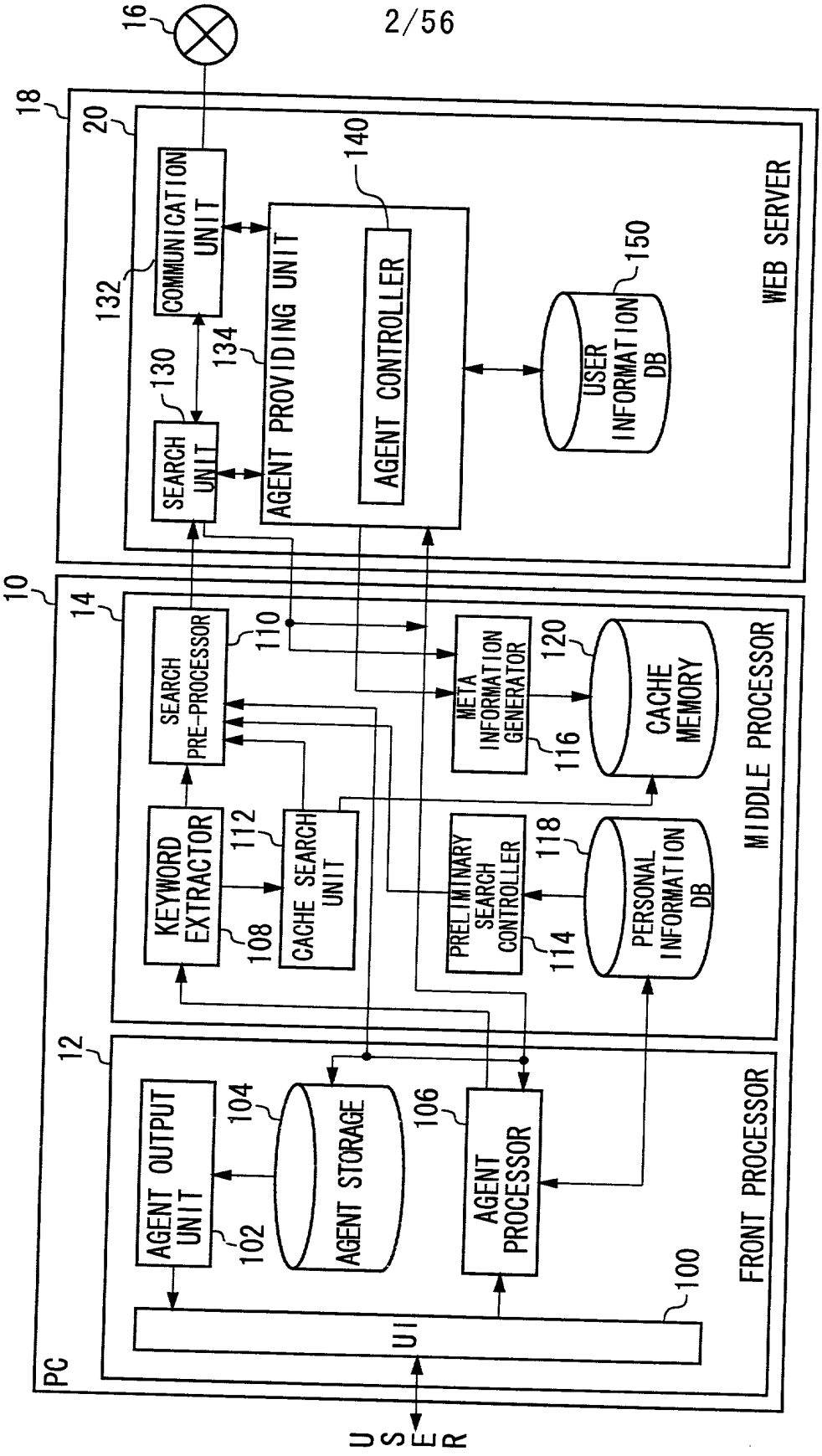

16
18
20
WEB SERVER
COMMUNICATION UNIT
132
140
AGENT PROVIDING UNIT
AGENT CONTROLLER
150
USER INFORMATION DB
SEARCH UNIT
130
134
10
14
MIDDLE PROCESSOR
SEARCH PRE-PROCESSOR
110
META INFORMATION GENERATOR
120
CACHE MEMORY
116
KEYWORD EXTRACTOR
112
CACHE SEARCH UNIT
108
PRELIMINARY SEARCH CONTROLLER
118
PERSONAL INFORMATION DB
114
12
FRONT PROCESSOR
AGENT OUTPUT UNIT
104
AGENT STORAGE
106
AGENT PROCESSOR
102
100
UI
PC
USER

FIG. 5

FIG. 6

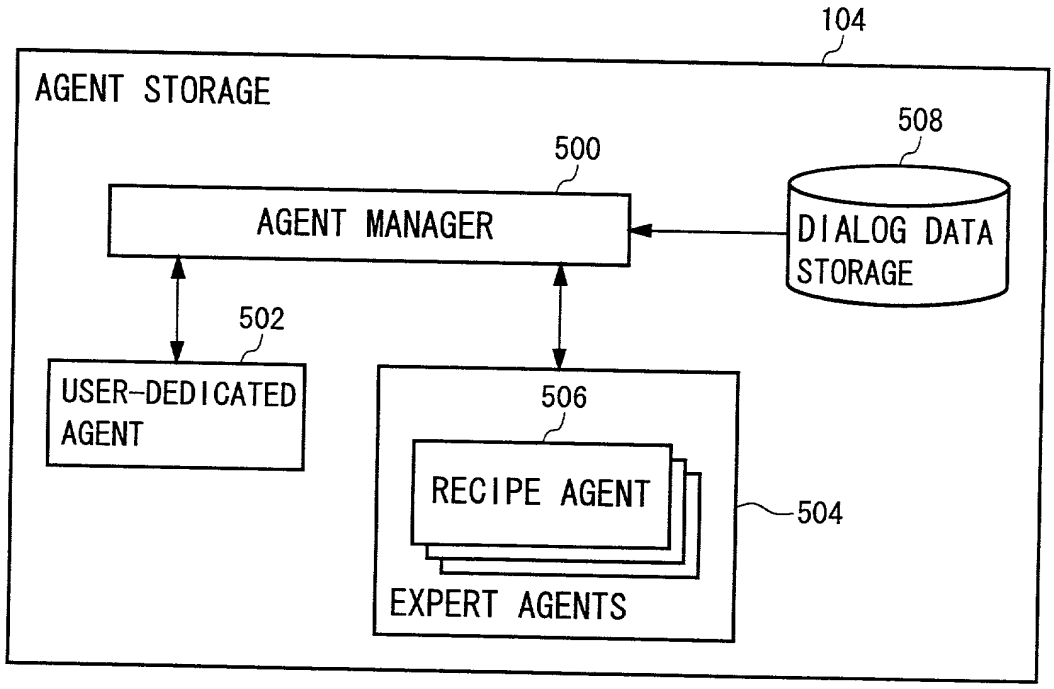

104
AGENT STORAGE
508
500
AGENT MANAGER
DIALOG DATA STORAGE
502
USER-DEDICATED AGENT
506
RECIPE AGENT
504
EXPERT AGENTS

FIG. 7

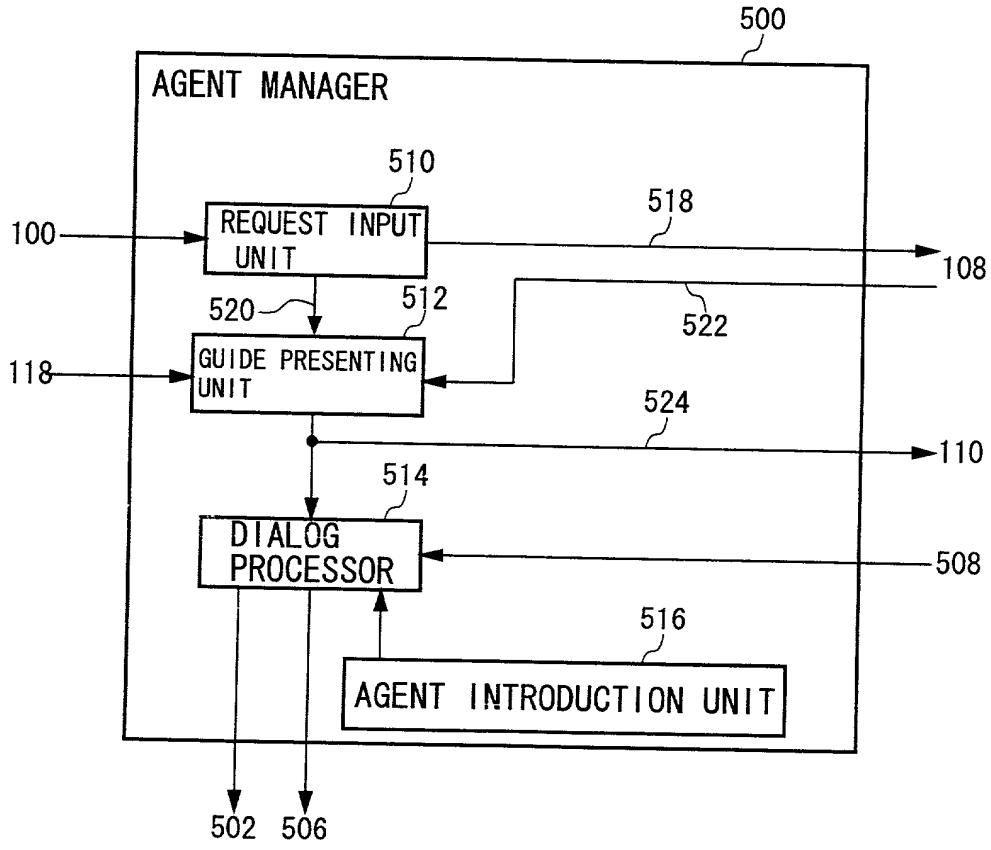

500
AGENT MANAGER
510
100
REQUEST INPUT UNIT
518
108
520
512
522
118
GUIDE PRESENTING UNIT
524
110
514
DIALOG PROCESSOR
508
516
AGENT INTRODUCTION UNIT
502
506

FIG. 8

PREFERENCE	CHINESE	530
HISTORY	C C J I J J ・・・	532
CONDITION	GOOD/ A LITTLE HIGH BLOOD PRESSURE	534
UNFAVORITE STUFF	SHELLFISH, ONION	536
BUDGET A	800 YEN	538
BUDGET B	2000 YEN	540

118a

FIG. 9

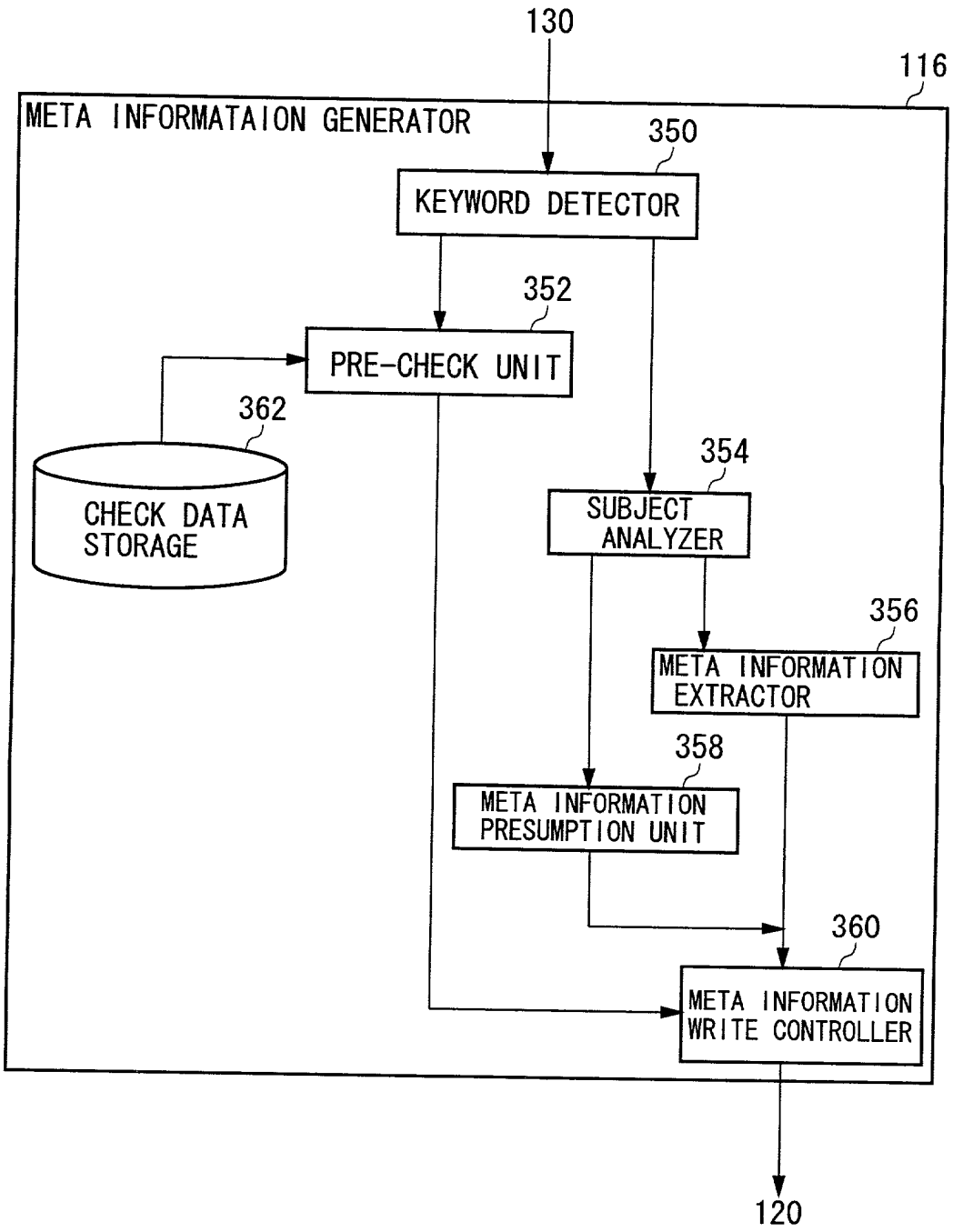

130
116
META INFORMATAION GENERATOR
350
KEYWORD DETECTOR
352
PRE-CHECK UNIT
362
CHECK DATA STORAGE
354
SUBJECT ANALYZER
356
META INFORMATION EXTRACTOR
358
META INFORMATION PRESUMPTION UNIT
360
META INFORMATION WRITE CONTROLLER
120

FIG. 10

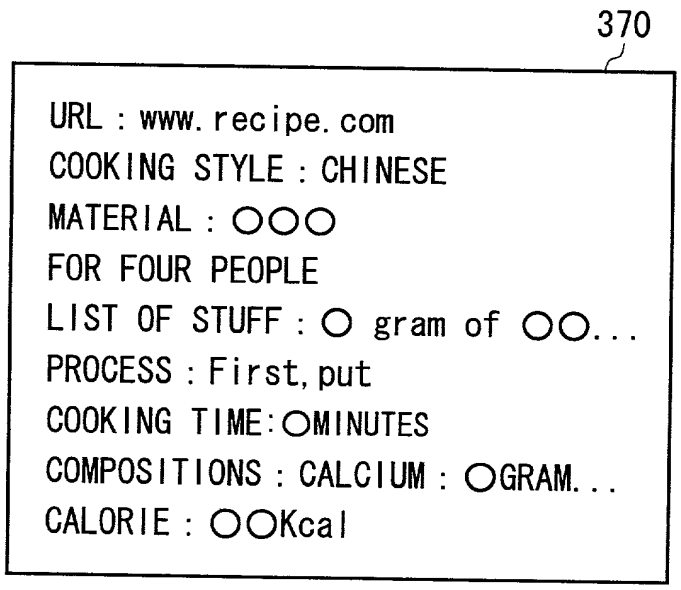

370
URL : www.recipe.com
COOKING STYLE : CHINESE
MATERIAL : ○○○
FOR FOUR PEOPLE
LIST OF STUFF : ○ gram of ○○...
PROCESS : First, put
COOKING TIME:○MINUTES
COMPOSITIONS : CALCIUM : ○GRAM...
CALORIE : ○○Kcal

FIG. 11

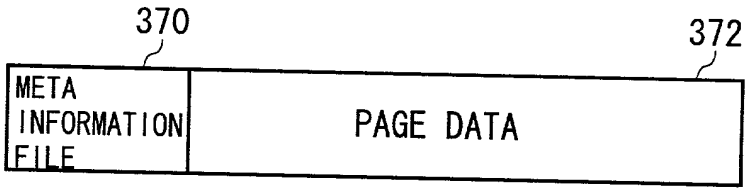

370
372
META
INFORMATION
FILE
PAGE DATA

FIG. 12

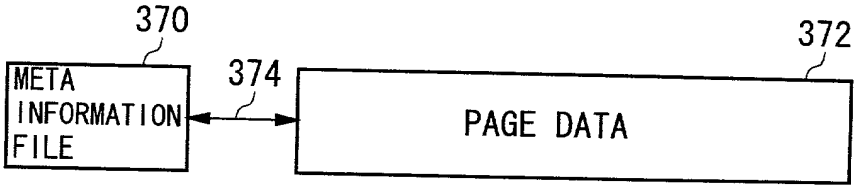

370
374
372
META
INFORMATION
FILE
PAGE DATA

FIG. 13

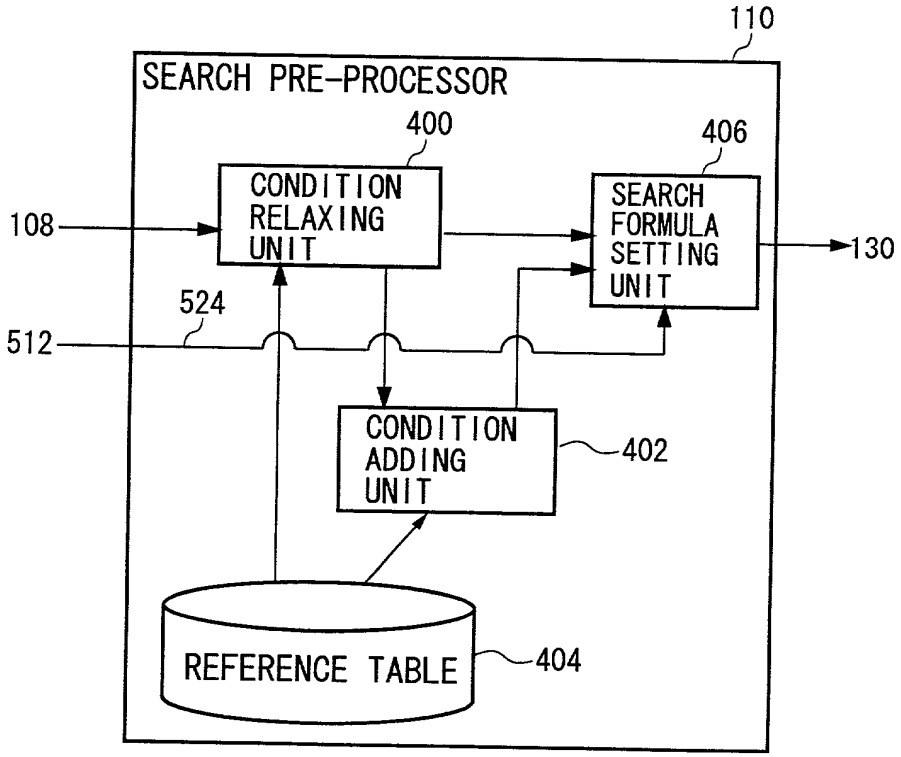
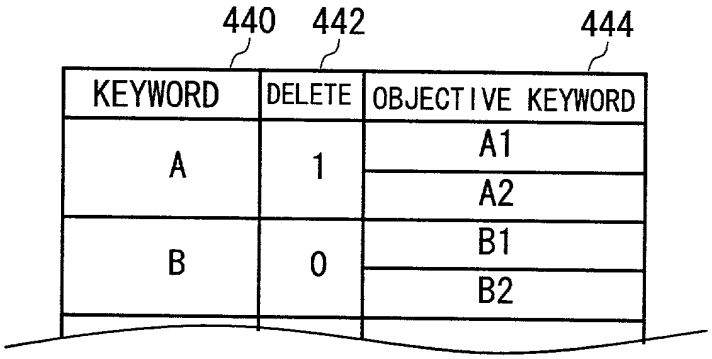

110
SEARCH PRE-PROCESSOR
400
406
CONDITION RELAXING UNIT
SEARCH FORMULA SETTING UNIT
108
130
524
512
CONDITION ADDING UNIT
402
REFERENCE TABLE
404

FIG. 14



Copy provided by USPTO from the PIRS Image Database on 06/30/2005

FIG. 15

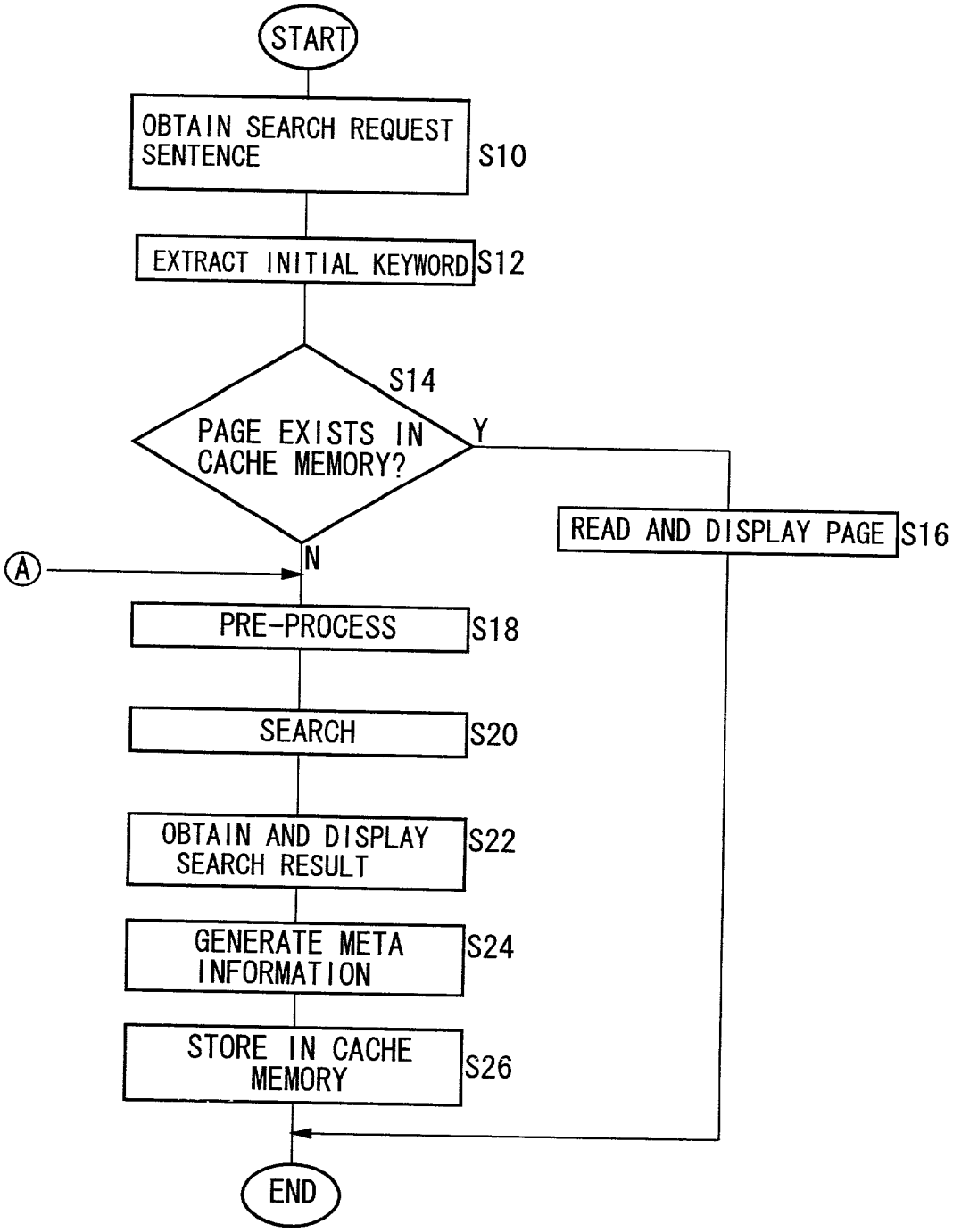

START
OBTAIN SEARCH REQUEST SENTENCE
S10
EXTRACT INITIAL KEYWORD
S12
S14
PAGE EXISTS IN CACHE MEMORY?
Y
N
READ AND DISPLAY PAGE
S16
A
PRE-PROCESS
S18
SEARCH
S20
OBTAIN AND DISPLAY SEARCH RESULT
S22
GENERATE META INFORMATION
S24
STORE IN CACHE MEMORY
S26
END

FIG. 16

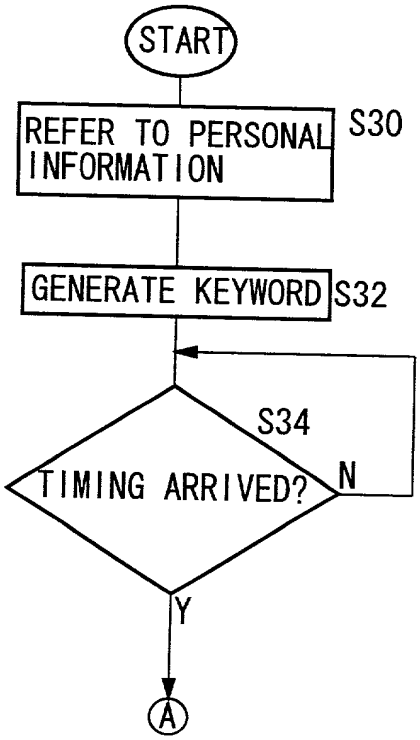
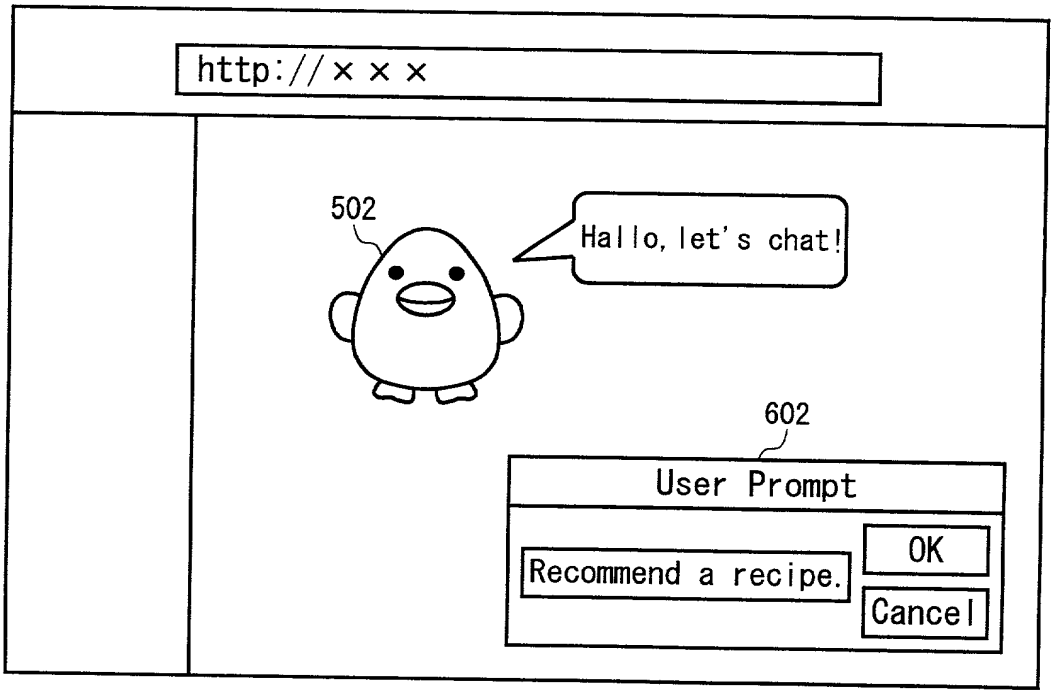
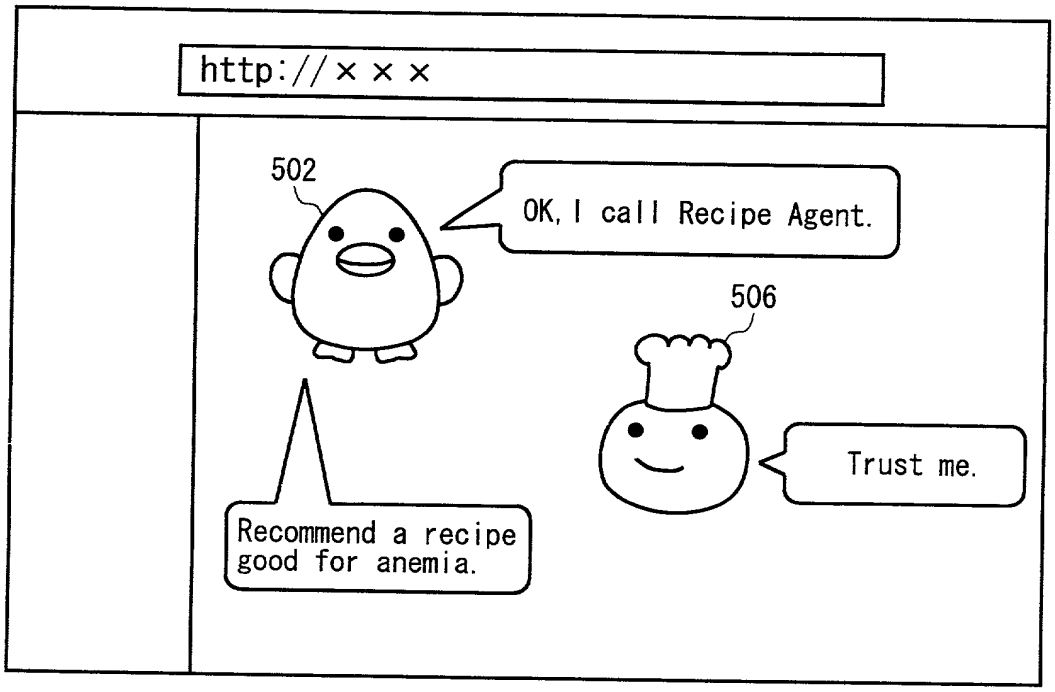

START
REFER TO PERSONAL INFORMATION
S30
GENERATE KEYWORD
S32
S34
TIMING ARRIVED?
N
Y
A

FIG. 17



600

FIG. 18



600

FIG. 19

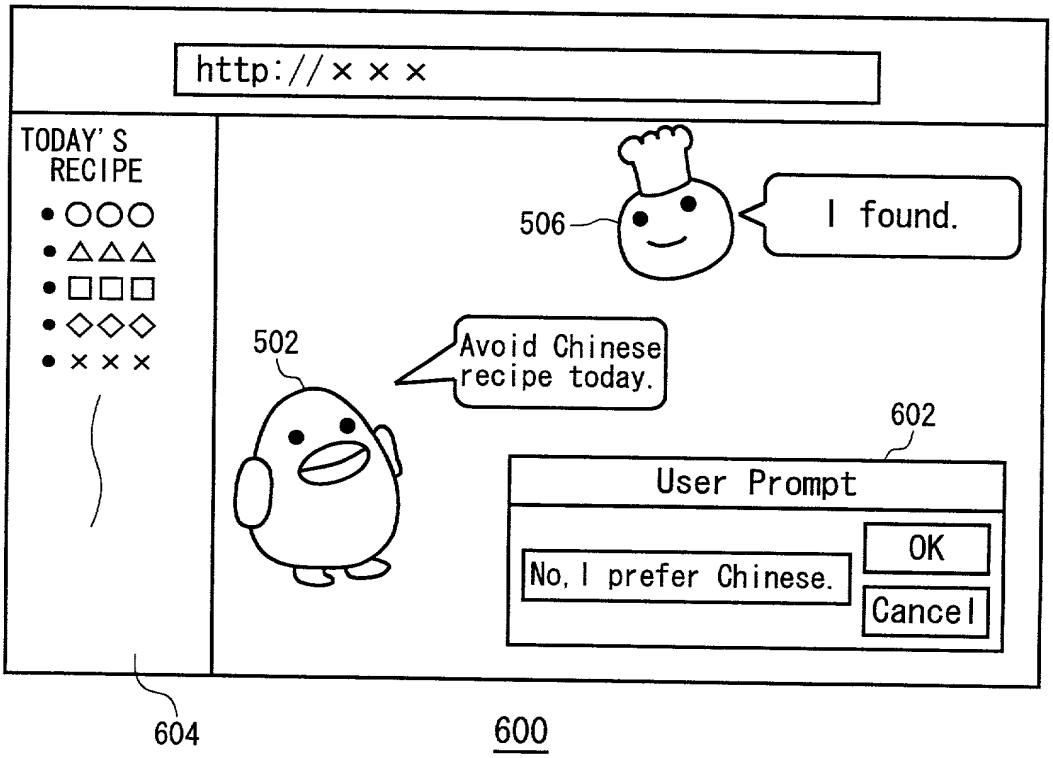

http://×××
TODAY'S RECIPE
●○○○
●△△△
●□□□
●◇◇◇
●×××
506
I found.
502
Avoid Chinese recipe today.
602
User Prompt
No, I prefer Chinese.
OK
Cancel
604
600

FIG. 20

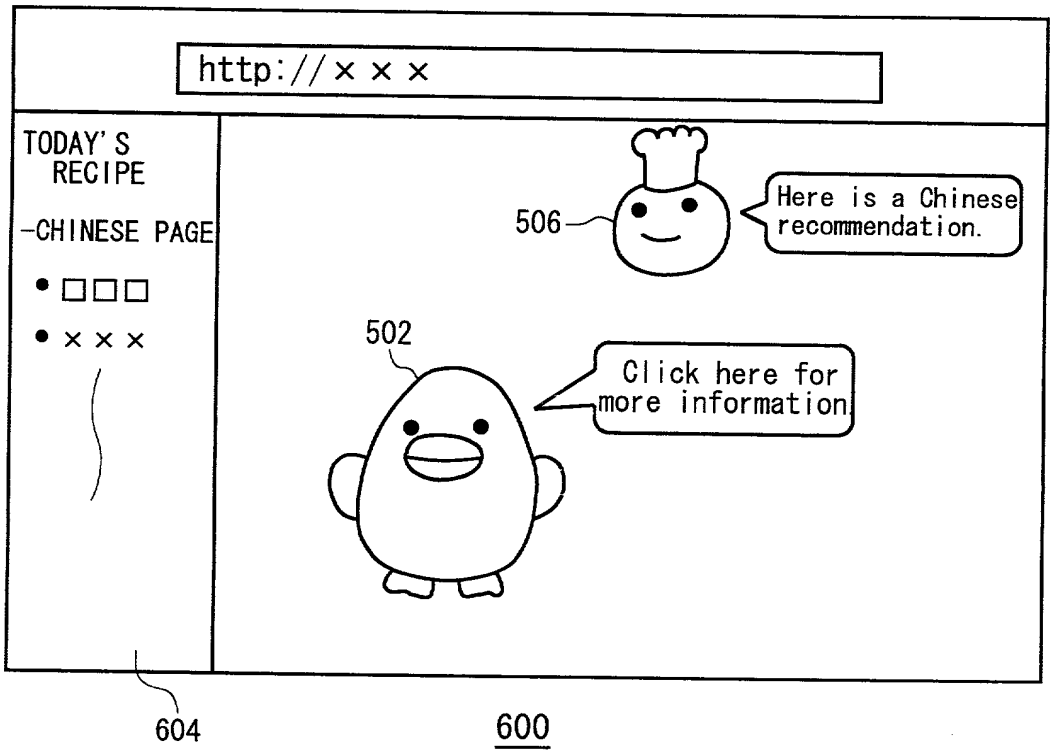

http://×××
TODAY'S RECIPE
-CHINESE PAGE
●□□□
●×××
506
Here is a Chinese recommendation.
502
Click here for more information
604
600

FIG. 21

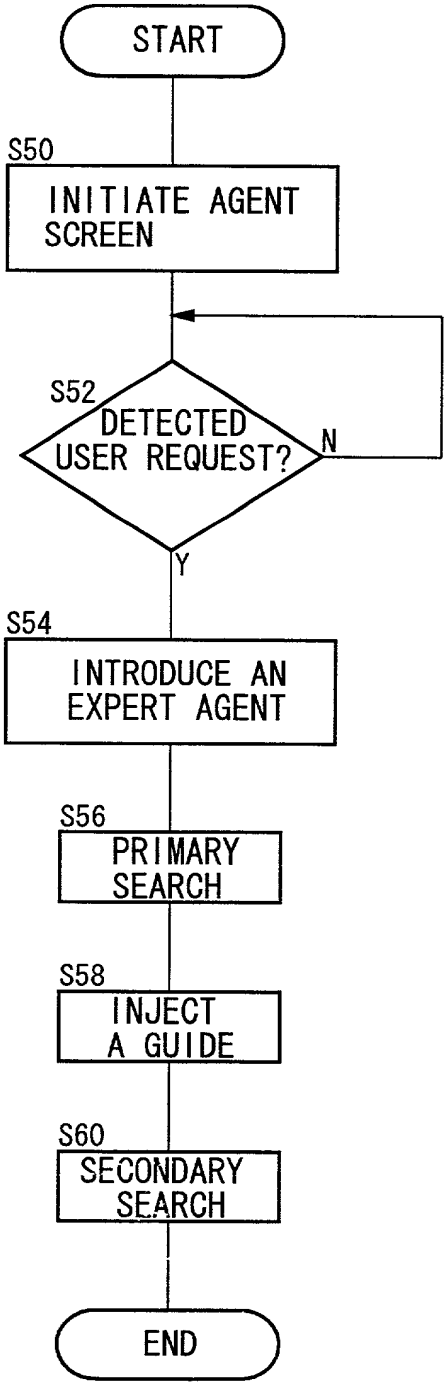

START
S50
INITIATE AGENT SCREEN
S52
DETECTED USER REQUEST?
N
Y
S54
INTRODUCE AN EXPERT AGENT
S56
PRIMARY SEARCH
S58
INJECT A GUIDE
S60
SECONDARY SEARCH
END

FIG. 22

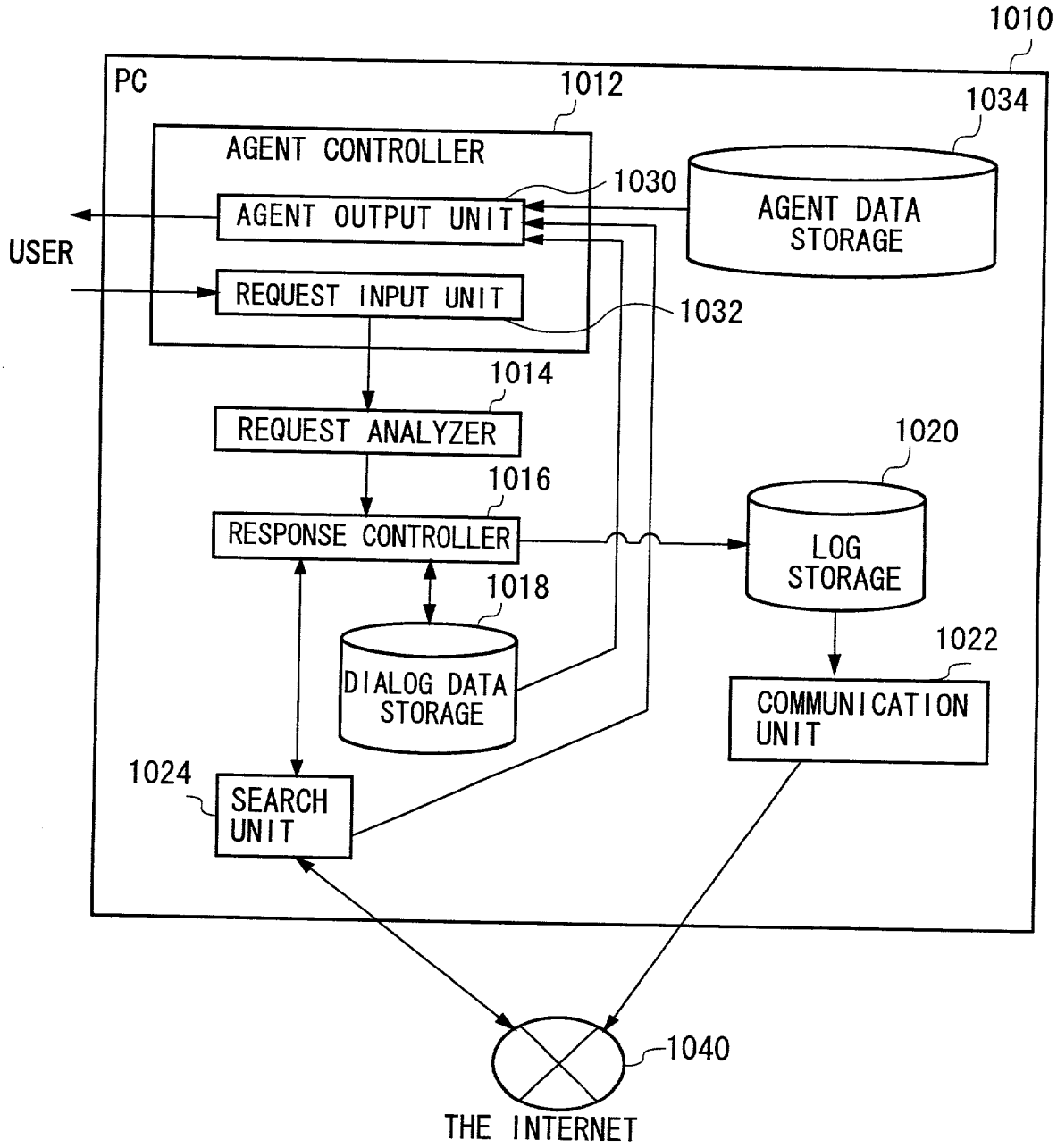

1010
PC
1012
1034
AGENT CONTROLLER
1030
AGENT OUTPUT UNIT
AGENT DATA STORAGE
USER
REQUEST INPUT UNIT
1032
1014
REQUEST ANALYZER
1020
1016
RESPONSE CONTROLLER
LOG STORAGE
1018
1022
DIALOG DATA STORAGE
COMMUNICATION UNIT
1024
SEARCH UNIT
1040
THE INTERNET

FIG. 23

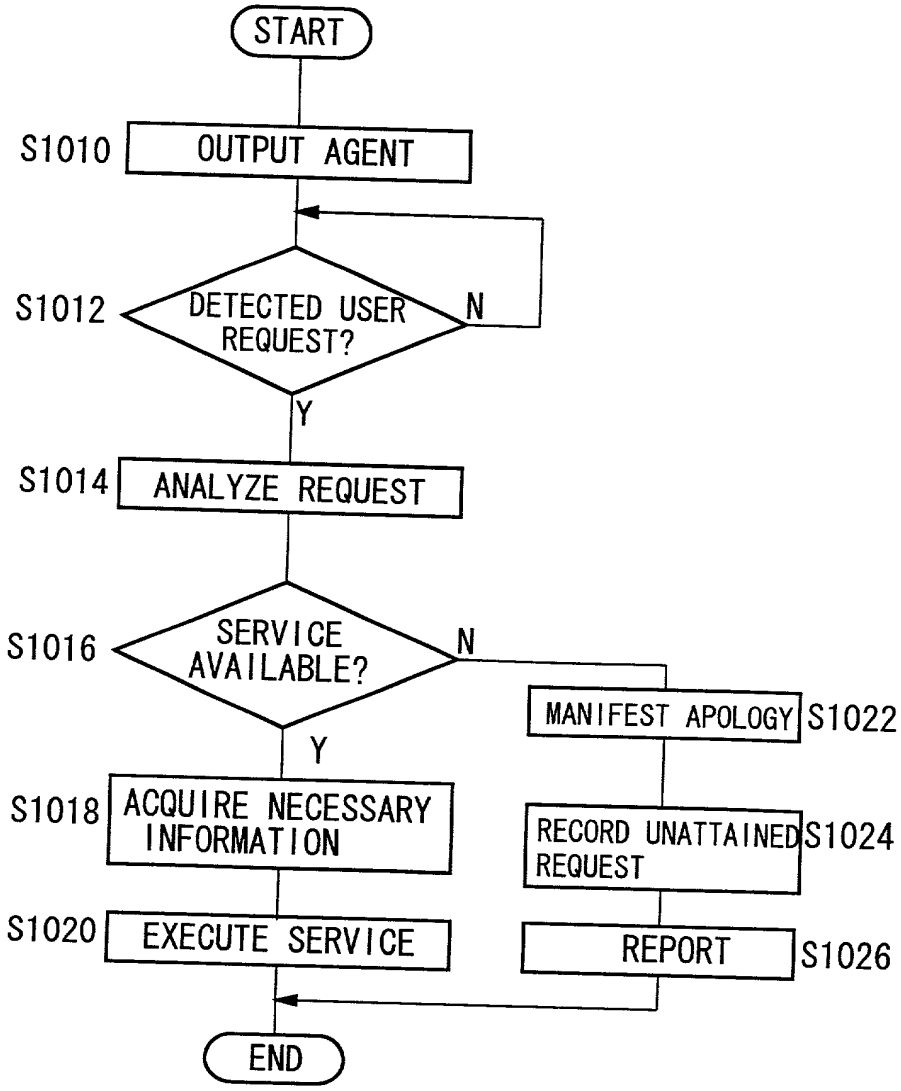

START
S1010
OUTPUT AGENT
S1012
DETECTED USER REQUEST?
N
Y
S1014
ANALYZE REQUEST
S1016
SERVICE AVAILABLE?
N
Y
MANIFEST APOLOGY
S1022
S1018
ACQUIRE NECESSARY INFORMATION
RECORD UNATTAINED REQUEST
S1024
S1020
EXECUTE SERVICE
REPORT
S1026
END

FIG. 24

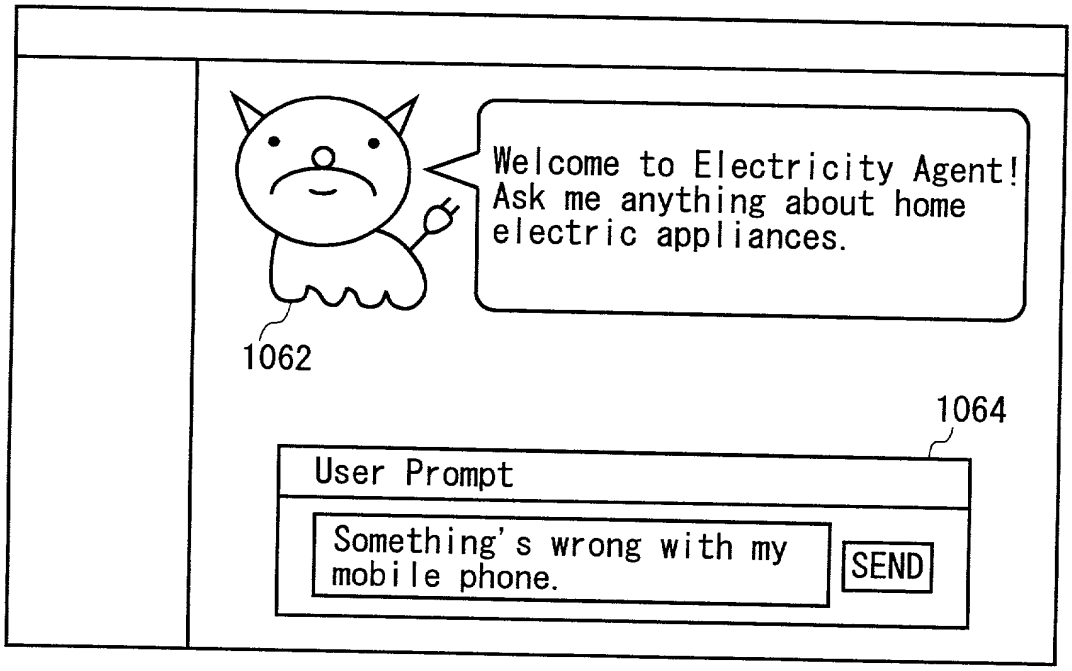

Welcome to Electricity Agent! Ask me anything about home electric appliances.
1062
1064
User Prompt
Something's wrong with my mobile phone.
SEND
1060

FIG. 25

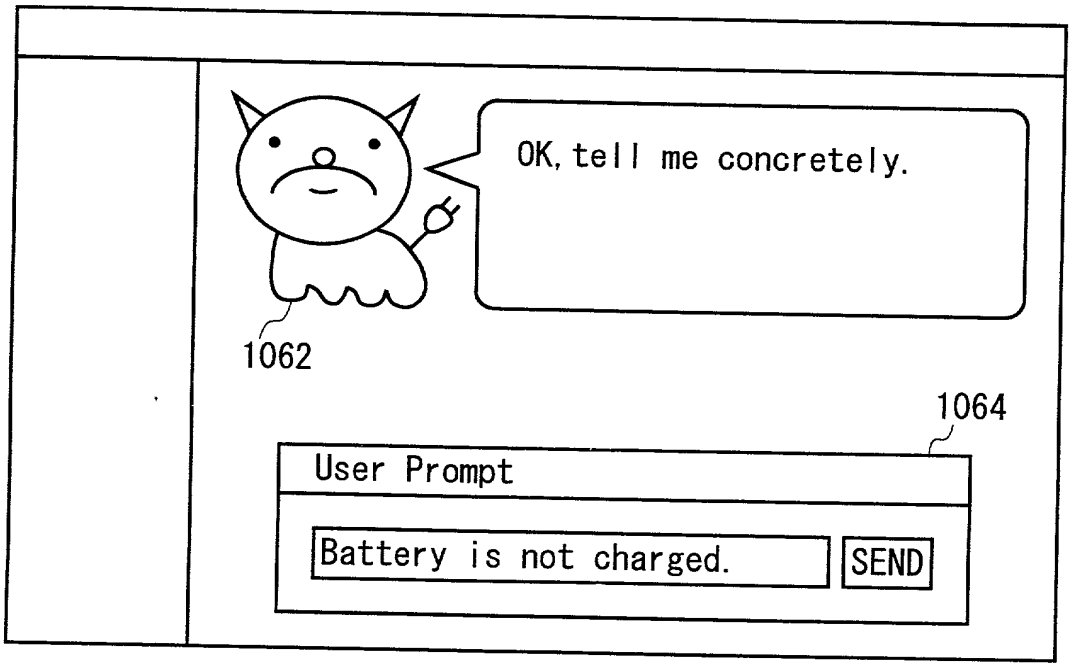

OK, tell me concretely.
1062
1064
User Prompt
Battery is not charged.
SEND
1060

FIG. 26

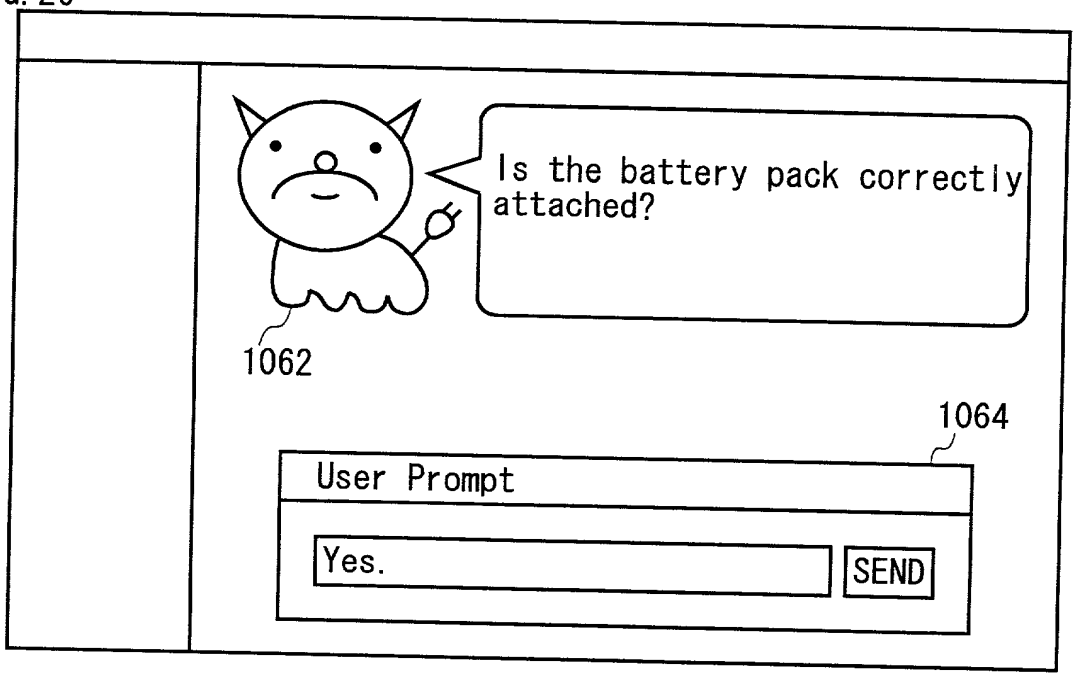

Is the battery pack correctly attached?
1062
1064
User Prompt
Yes.
SEND
1060

FIG. 27

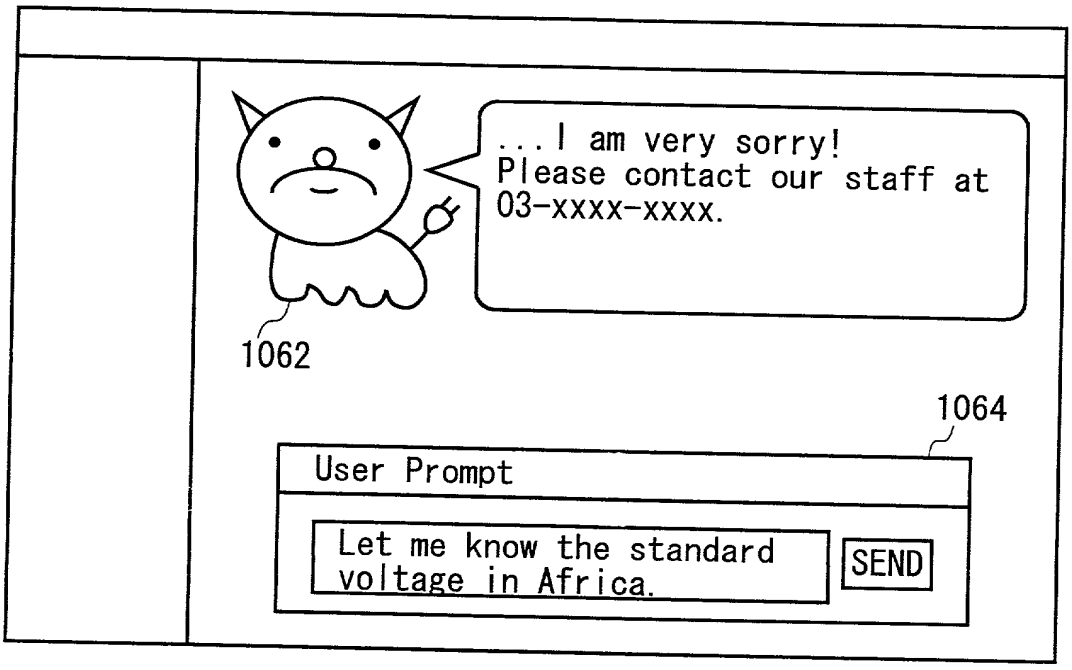

...I am very sorry!
Please contact our staff at
03-xxxx-xxxx.
1062
1064
User Prompt
Let me know the standard voltage in Africa.
SEND
1060

FIG. 28

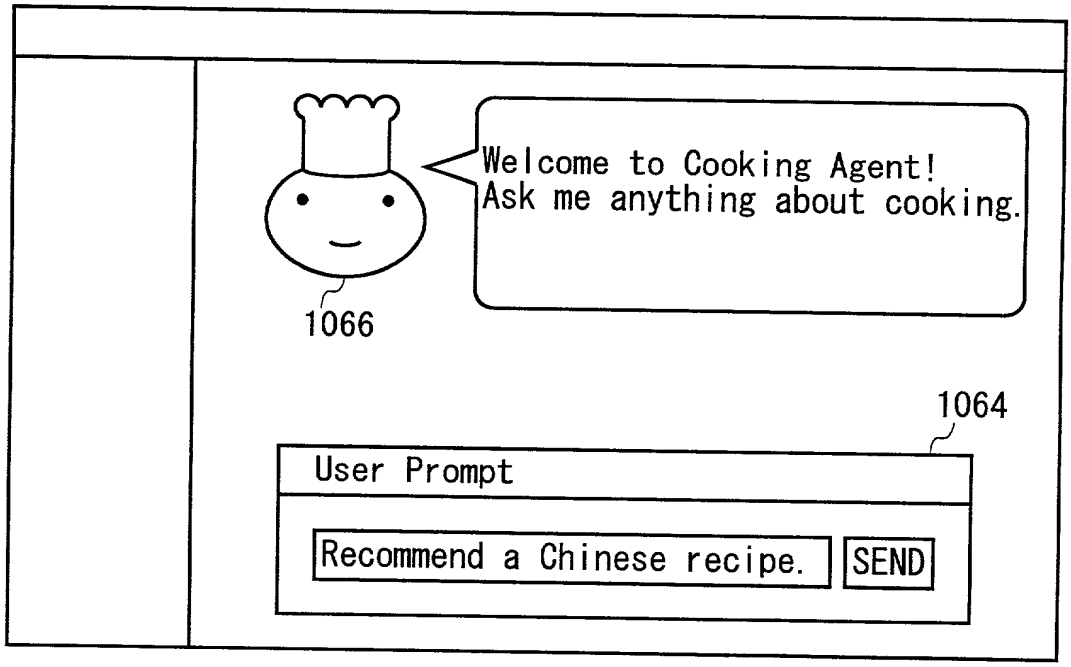

Welcome to Cooking Agent!
Ask me anything about cooking.
1066
1064
User Prompt
Recommend a Chinese recipe.
SEND
1060

FIG. 29

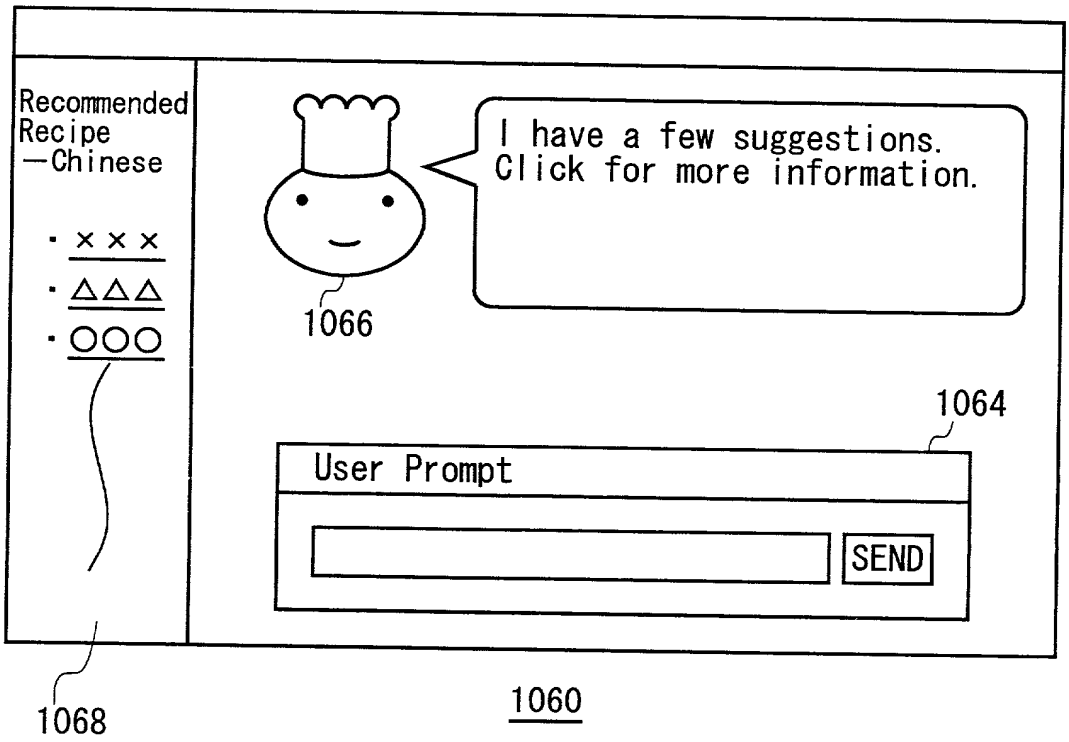
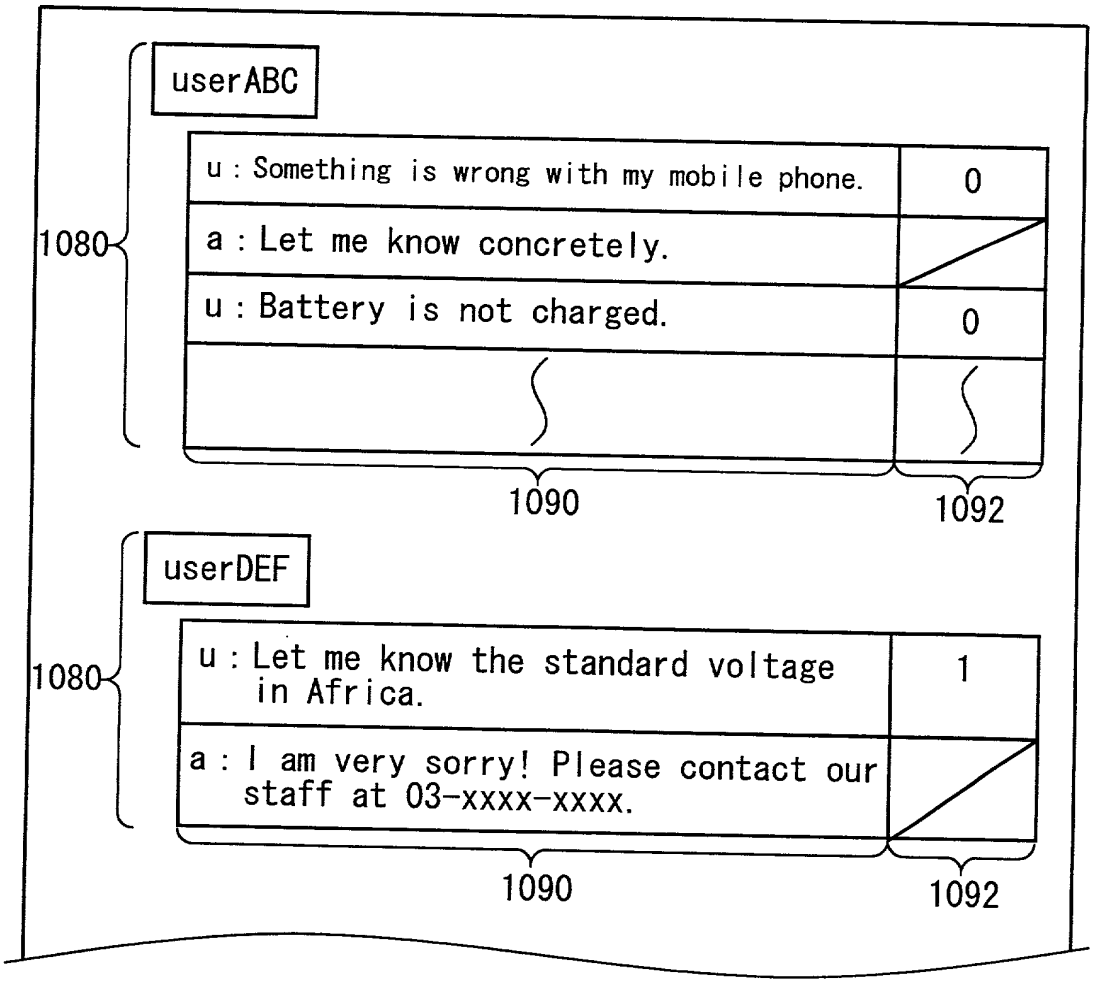

Recommended Recipe —Chinese
・×××
・△△△
・○○○
I have a few suggestions.
Click for more information.
1066
1064
User Prompt
SEND
1068
1060

FIG. 30


userABC
u : Something is wrong with my mobile phone.
0
a : Let me know concretely.
u : Battery is not charged.
0
1080
1090
1092
userDEF
u : Let me know the standard voltage in Africa.
1
a : I am very sorry! Please contact our staff at 03-xxxx-xxxx.
1080
1090
1092
1020

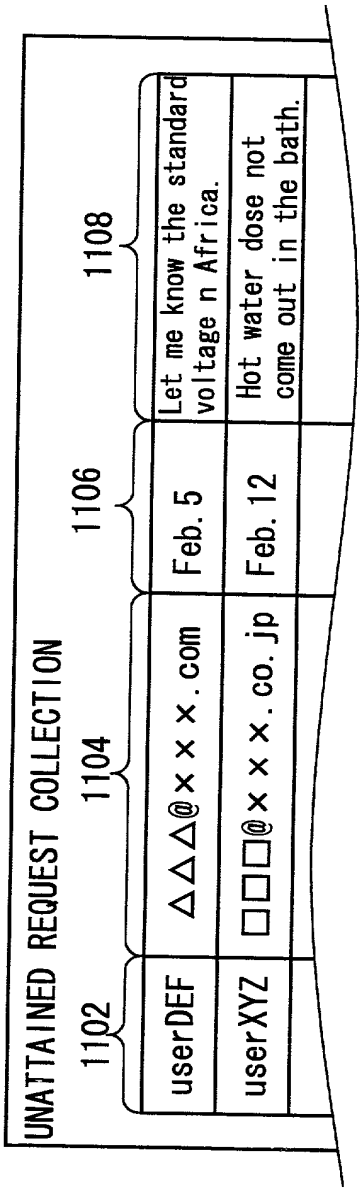
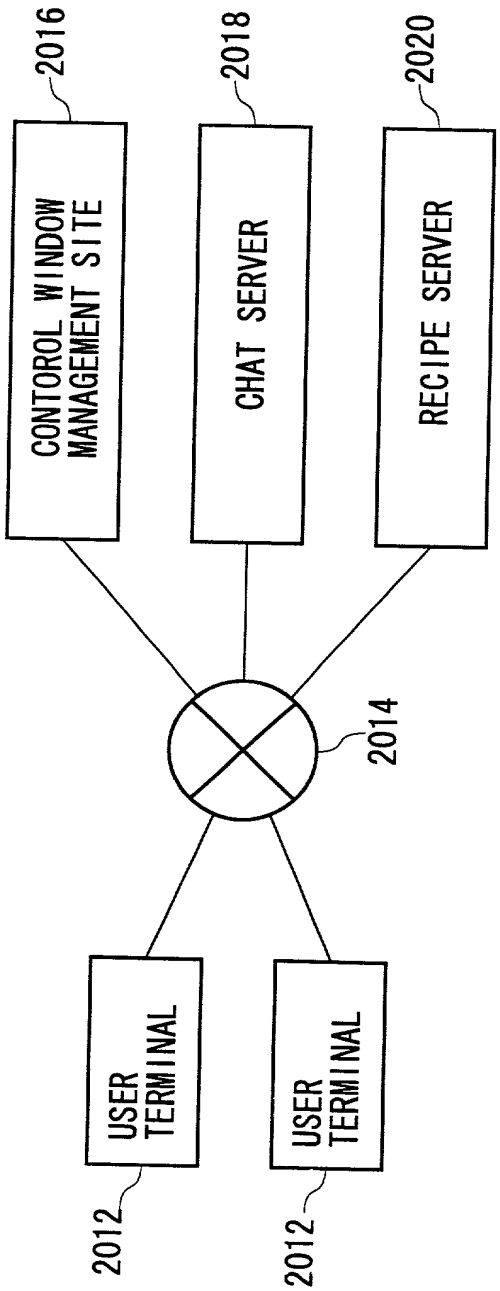

UNATTAINED REQUEST COLLECTION
1102
1104
1106
1108
userDEF
△△△@×××.com
Feb. 5
Let me know the standard voltage n Africa.
userXYZ
□□□@×××.co.jp
Feb. 12
Hot water dose not come out in the bath.
1100

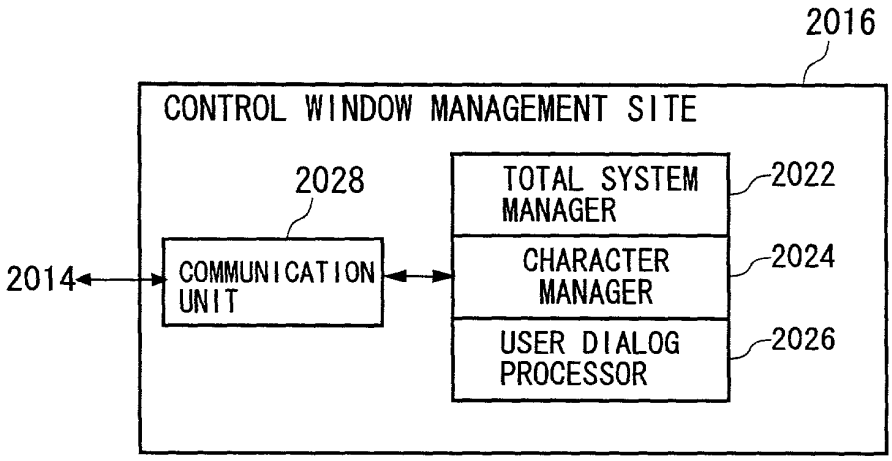
FIG. 31


2016
CONTOROL WINDOW MANAGEMENT SITE
2018
CHAT SERVER
2020
RECIPE SERVER
2014
USER TERMINAL
2012
USER TERMINAL
2012

2010

FIG. 32

FIG. 33


2016
CONTROL WINDOW MANAGEMENT SITE
2028
TOTAL SYSTEM MANAGER
2022
2014
COMMUNICATION UNIT
CHARACTER MANAGER
2024
USER DIALOG PROCESSOR
2026

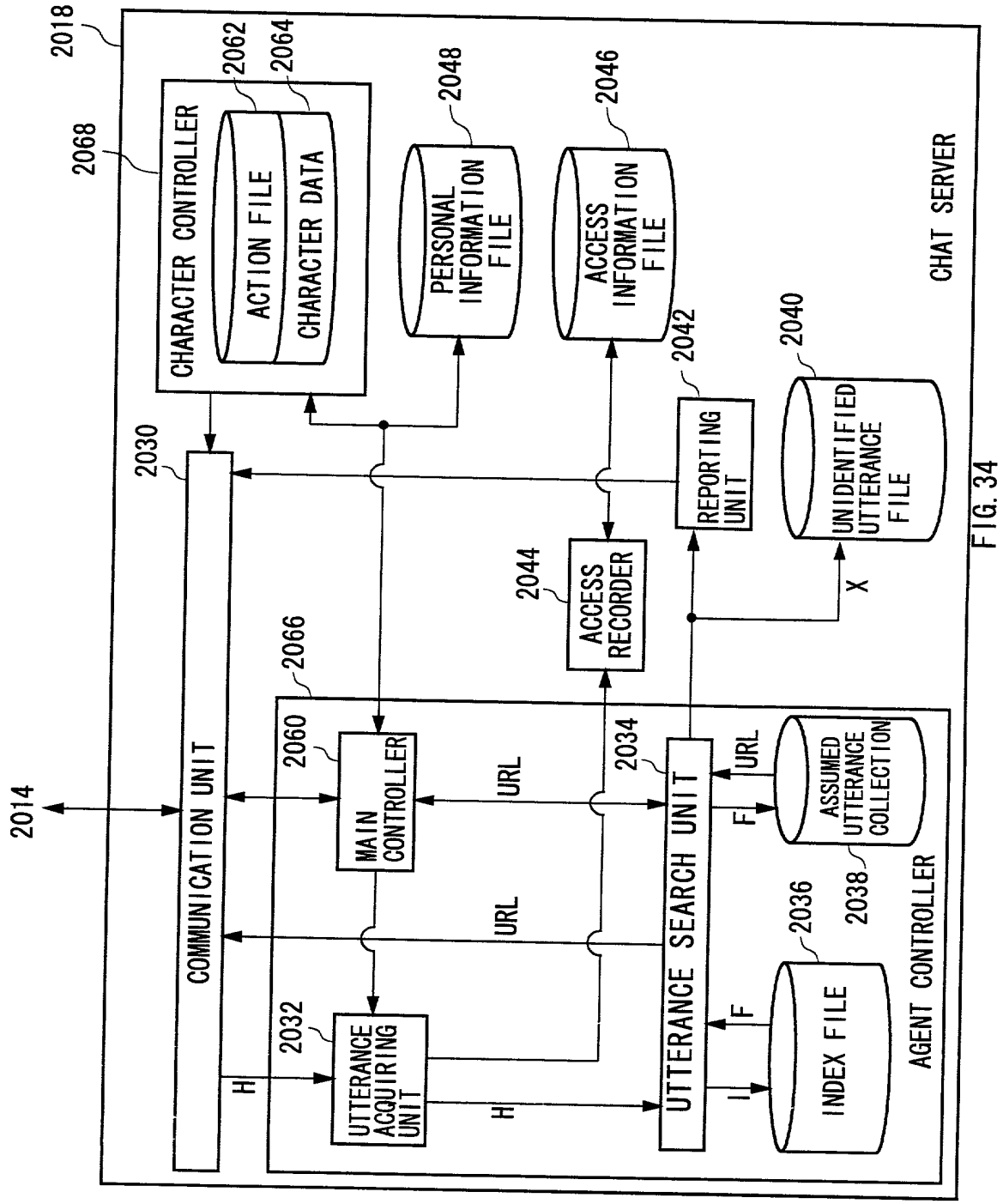
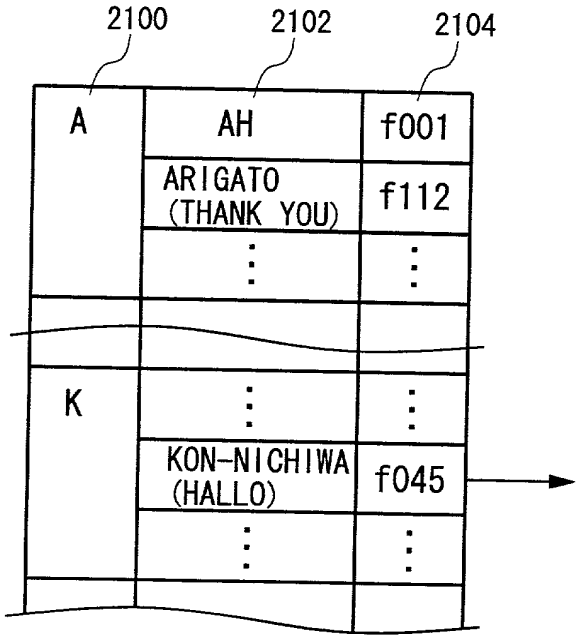

2018
CHAT SERVER
2062
2064
2068
CHARACTER CONTROLLER
ACTION FILE
CHARACTER DATA
2048
PERSONAL INFORMATION FILE
2046
ACCESS INFORMATION FILE
2042
REPORTING UNIT
2040
UNIDENTIFIED UTTERANCE FILE
2030
2044
ACCESS RECORDER
X
2066
2060
MAIN CONTROLLER
URL
2034
URL
ASSUMED UTTERANCE COLLECTION
F
2014
COMMUNICATION UNIT
URL
UTTERANCE SEARCH UNIT
2036
2038
2032
UTTERANCE ACQUIRING UNIT
F
INDEX FILE
H
H
I
AGENT CONTROLLER

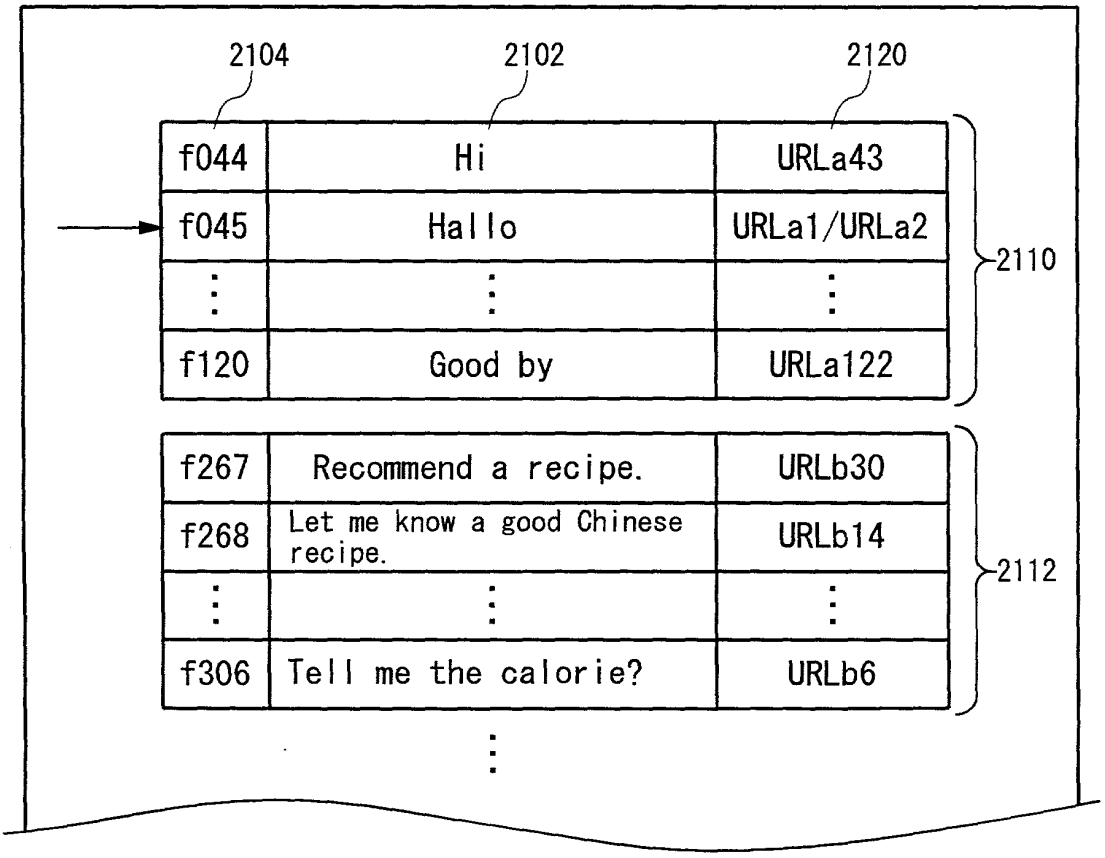
FIG. 34

FIG. 35



Express Mail Label No. EL 880 760 225 US

FIG. 36


2104
2102
2120
f044
Hi
URLa43
f045
Hallo
URLa1/URLa2
f120
Good by
URLa122
2110
f267
Recommend a recipe.
URLb30
f268
Let me know a good Chinese recipe.
URLb14
f306
Tell me the calorie?
URLb6
2112

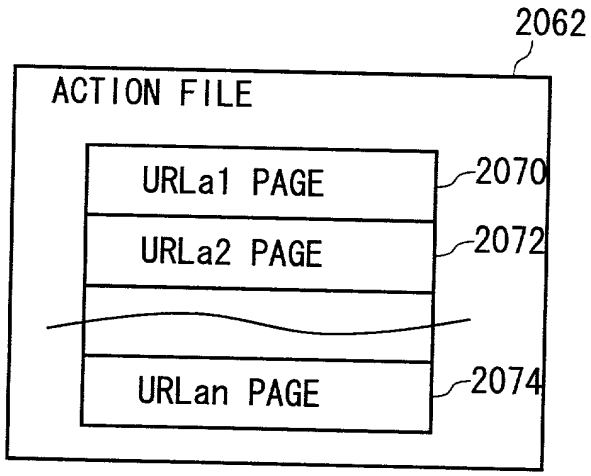
2038

FIG. 37

user1	CHAT, RECIPE, AUCTION
user2	TRAVEL, PC

2046

FIG. 38


2062
ACTION FILE
URLa1 PAGE
2070
URLa2 PAGE
2072
URLan PAGE
2074

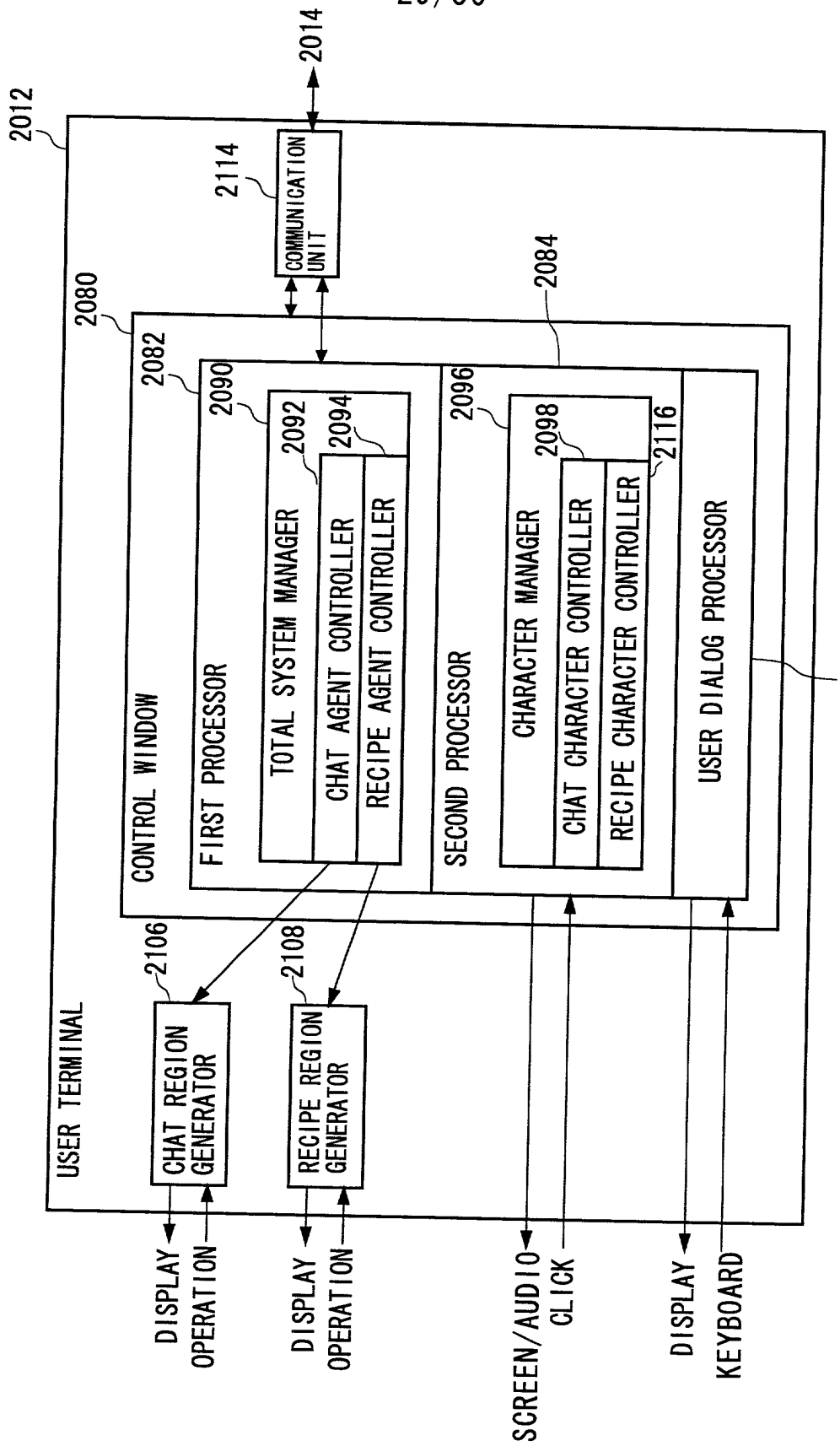

2012
2014
2114
COMMUNICATION UNIT
2080
2082
2084
CONTROL WINDOW
2090
FIRST PROCESSOR
2092
TOTAL SYSTEM MANAGER
2094
CHAT AGENT CONTROLLER
RECIPE AGENT CONTROLLER
2096
SECOND PROCESSOR
2098
CHARACTER MANAGER
2116
CHAT CHARACTER CONTROLLER
RECIPE CHARACTER CONTROLLER
USER DIALOG PROCESSOR
2086
USER TERMINAL
2106
CHAT REGION GENERATOR
2108
RECIPE REGION GENERATOR
DISPLAY
OPERATION
DISPLAY
OPERATION
SCREEN/AUDIO
CLICK
DISPLAY
KEYBOARD

FIG. 39

FIG. 40

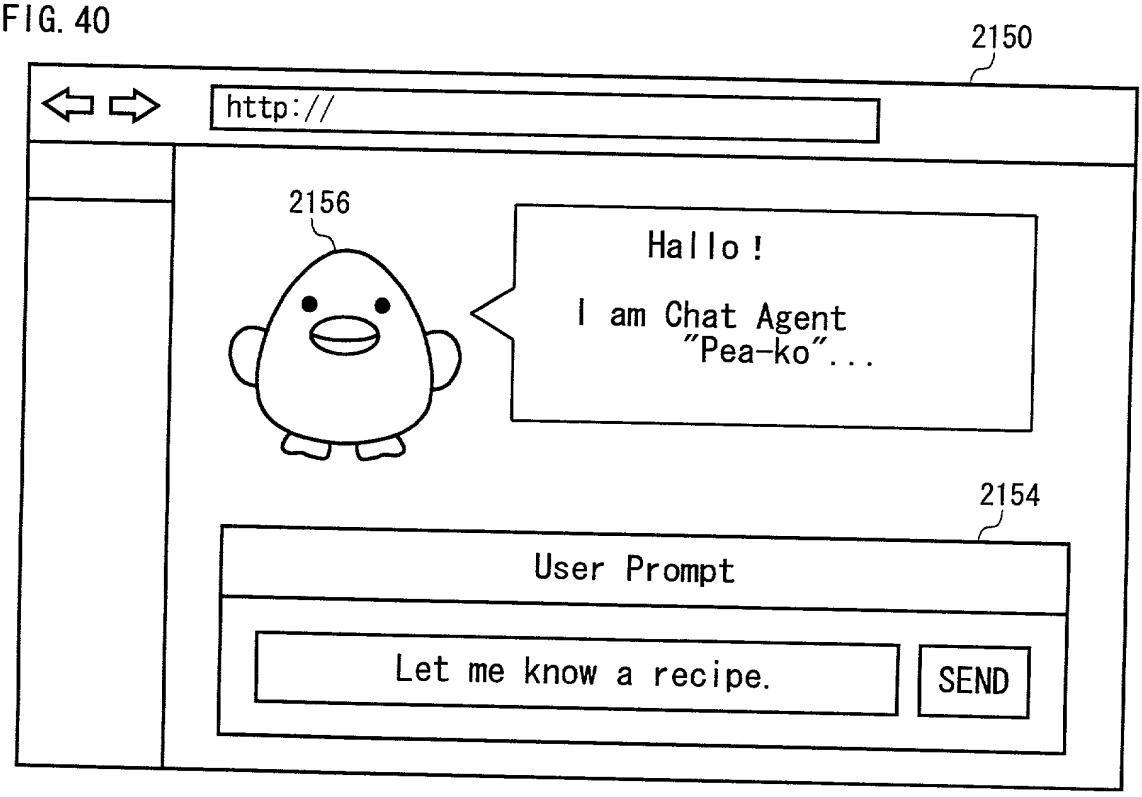

2150
http://
2156
Hallo!
I am Chat Agent
"Pea-ko"...
2154
User Prompt
Let me know a recipe.
SEND

FIG. 41

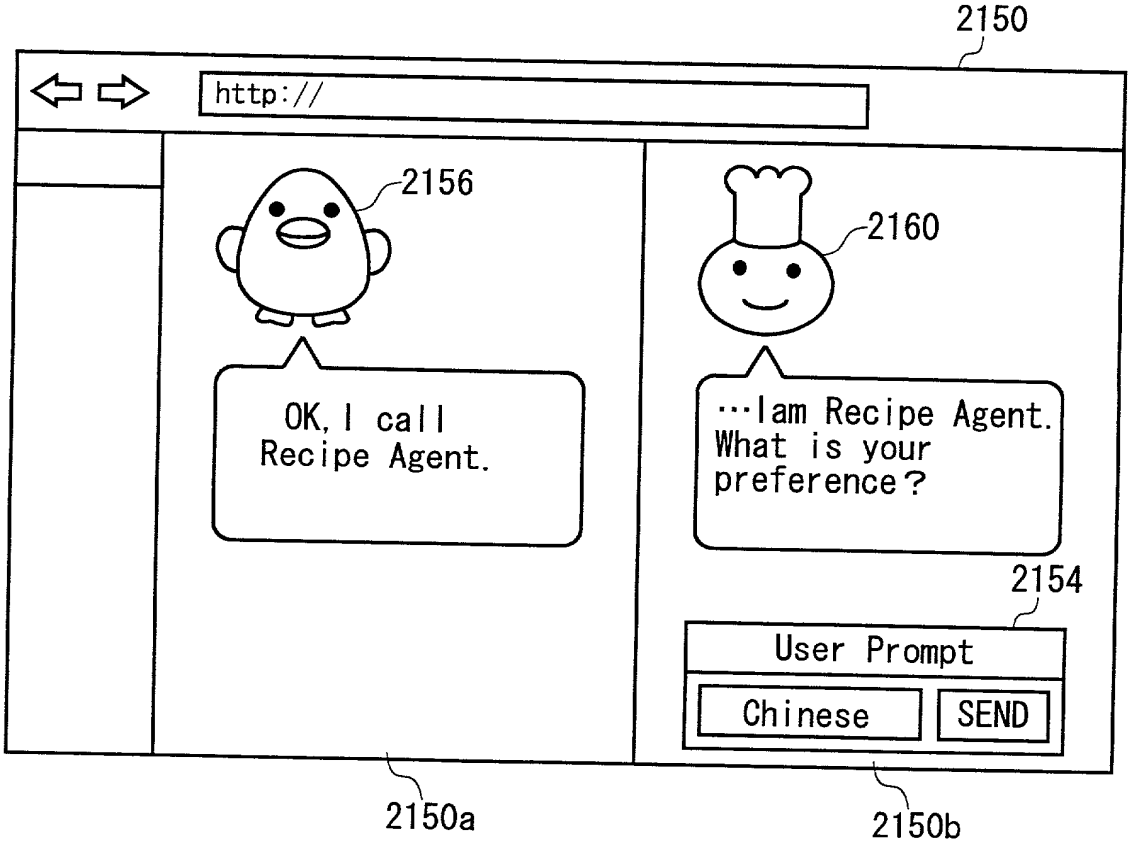

2150
http://
2156
OK, I call
Recipe Agent.
2160
…Iam Recipe Agent.
What is your
preference?
2154
User Prompt
Chinese
SEND
2150a
2150b

FIG. 42

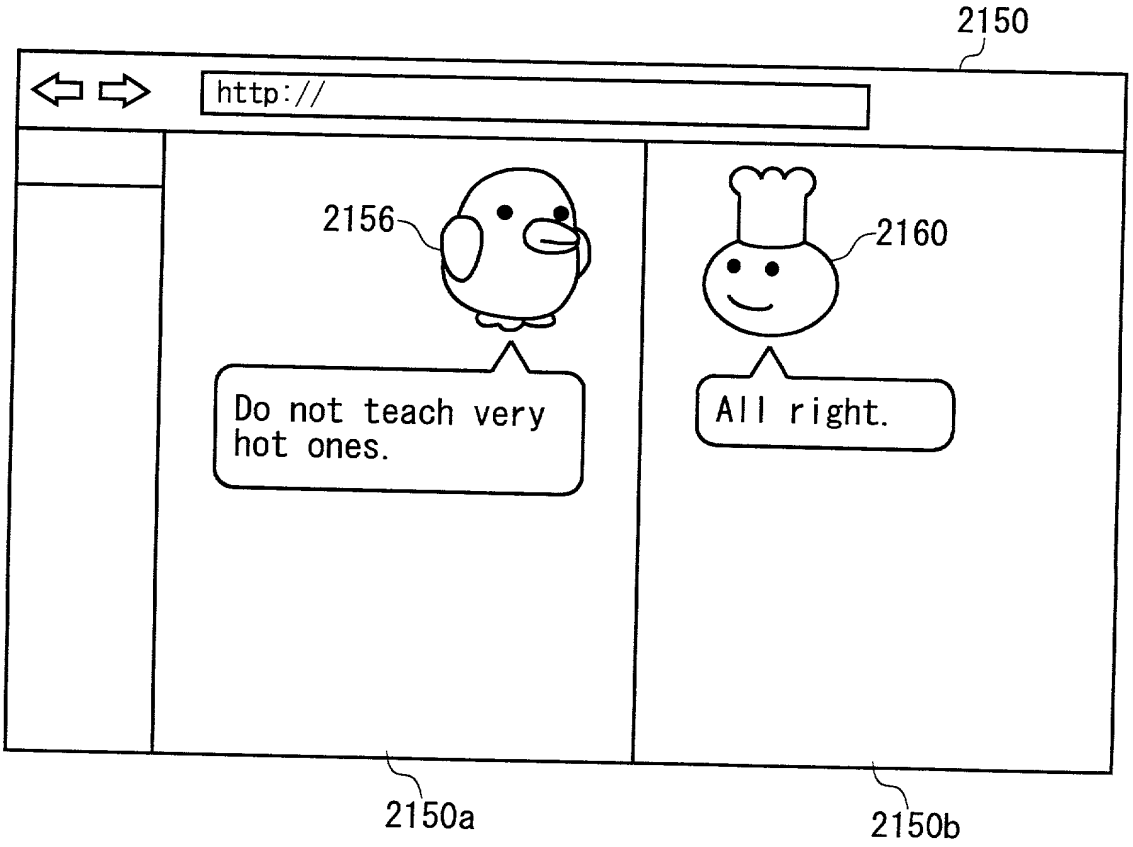
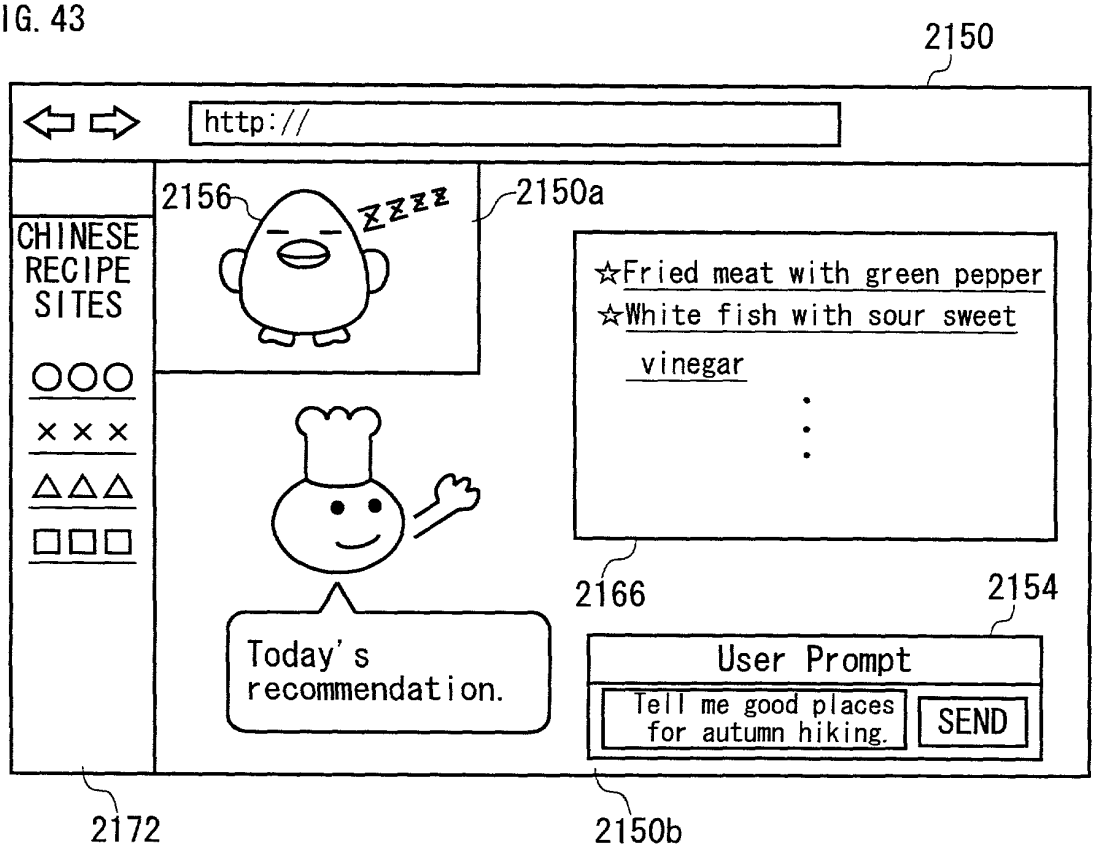

2150
http://
2156
2160
Do not teach very hot ones.
All right.
2150a
2150b

FIG. 43



Patent Application Publication

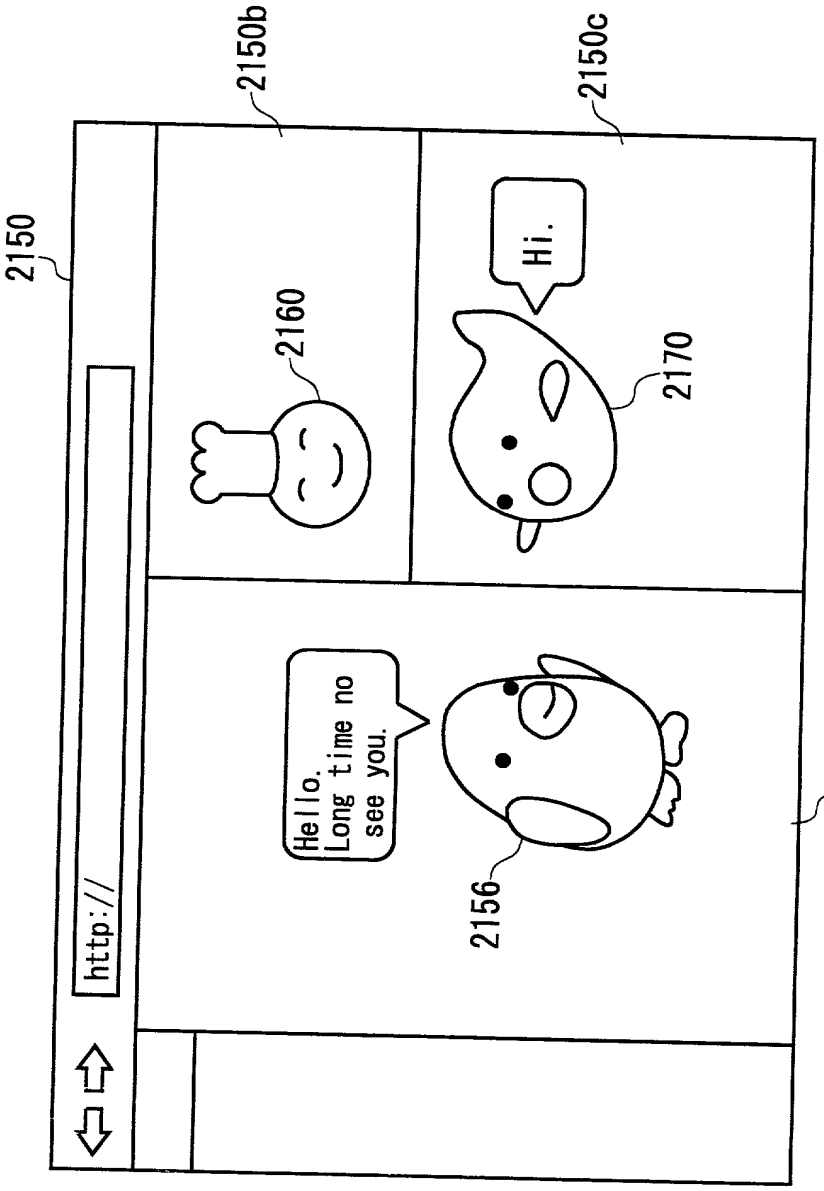
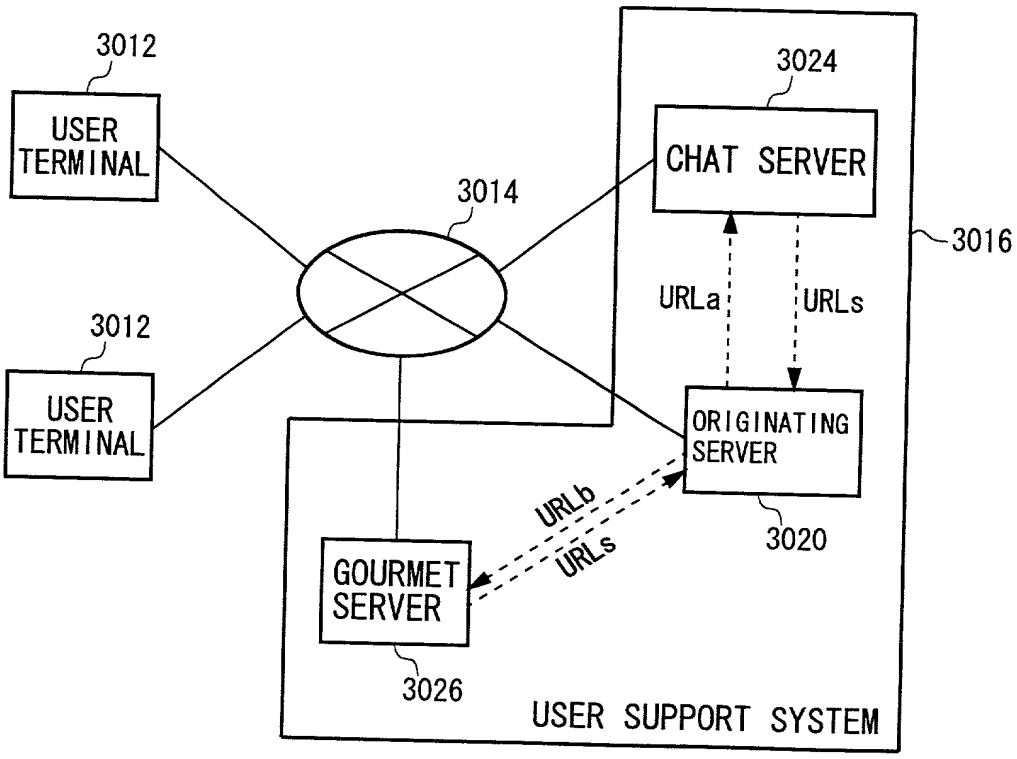

2150
2150b
2150c
2160
Hi.
2170
http://
Hello.
Long time no
see you.
2156
2150a

FIG. 44

FIG. 45


3012
USER TERMINAL
3012
USER TERMINAL
3014
3024
CHAT SERVER
3016
URLa
URLs
ORIGINATING SERVER
3020
URLb
URLs
GOURMET SERVER
3026
USER SUPPORT SYSTEM

3010

FIG. 46

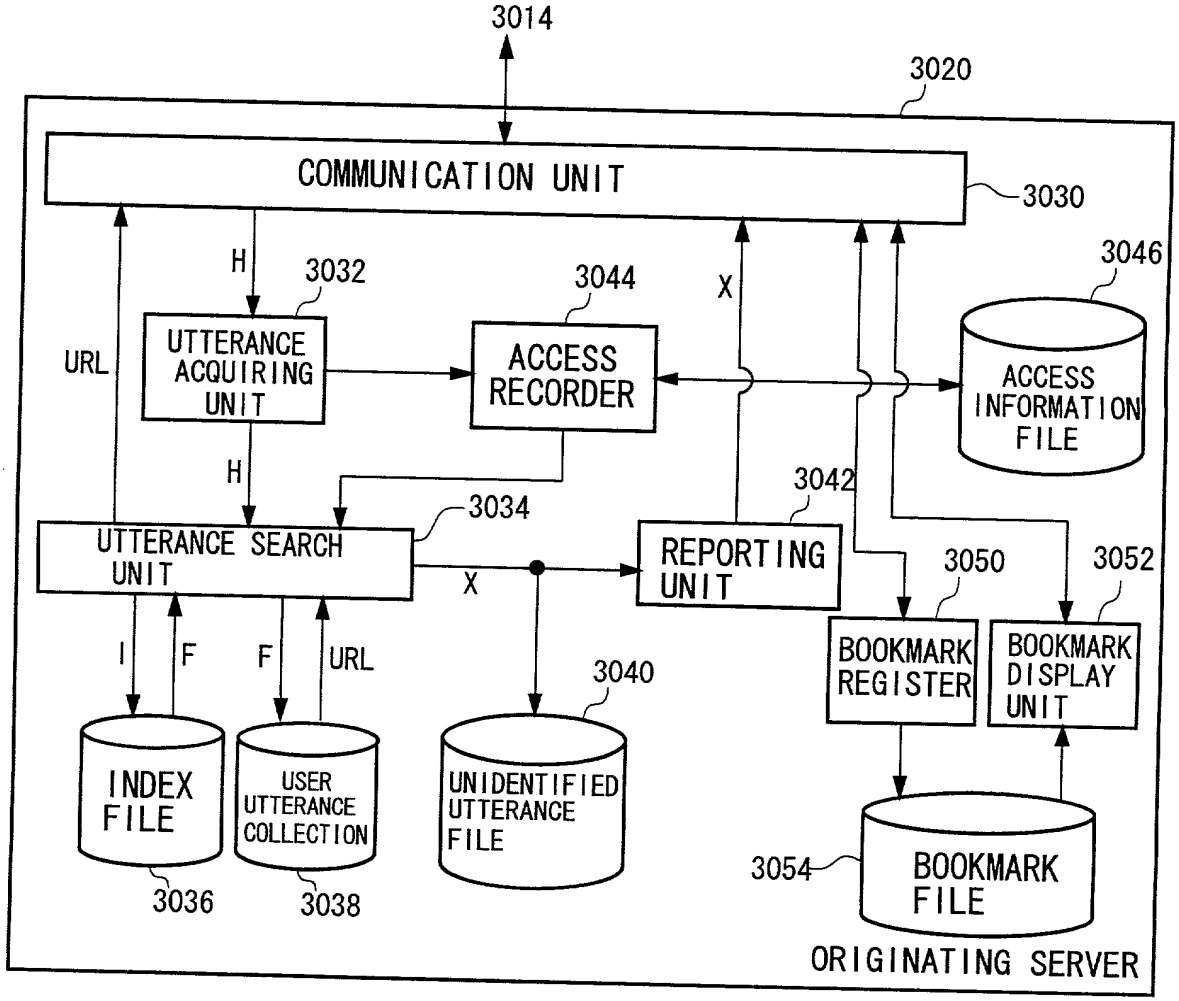

3014
3020
COMMUNICATION UNIT
3030
H
3032
3044
X
3046
URL
UTTERANCE ACQUIRING UNIT
ACCESS RECORDER
ACCESS INFORMATION FILE
H
3042
3034
UTTERANCE SEARCH UNIT
REPORTING UNIT
3050
3052
X
I
F
F
URL
3040
BOOKMARK REGISTER
BOOKMARK DISPLAY UNIT
INDEX FILE
USER UTTERANCE COLLECTION
UNIDENTIFIED UTTERANCE FILE
3054
BOOKMARK FILE
3036
3038
ORIGINATING SERVER

FIG. 47

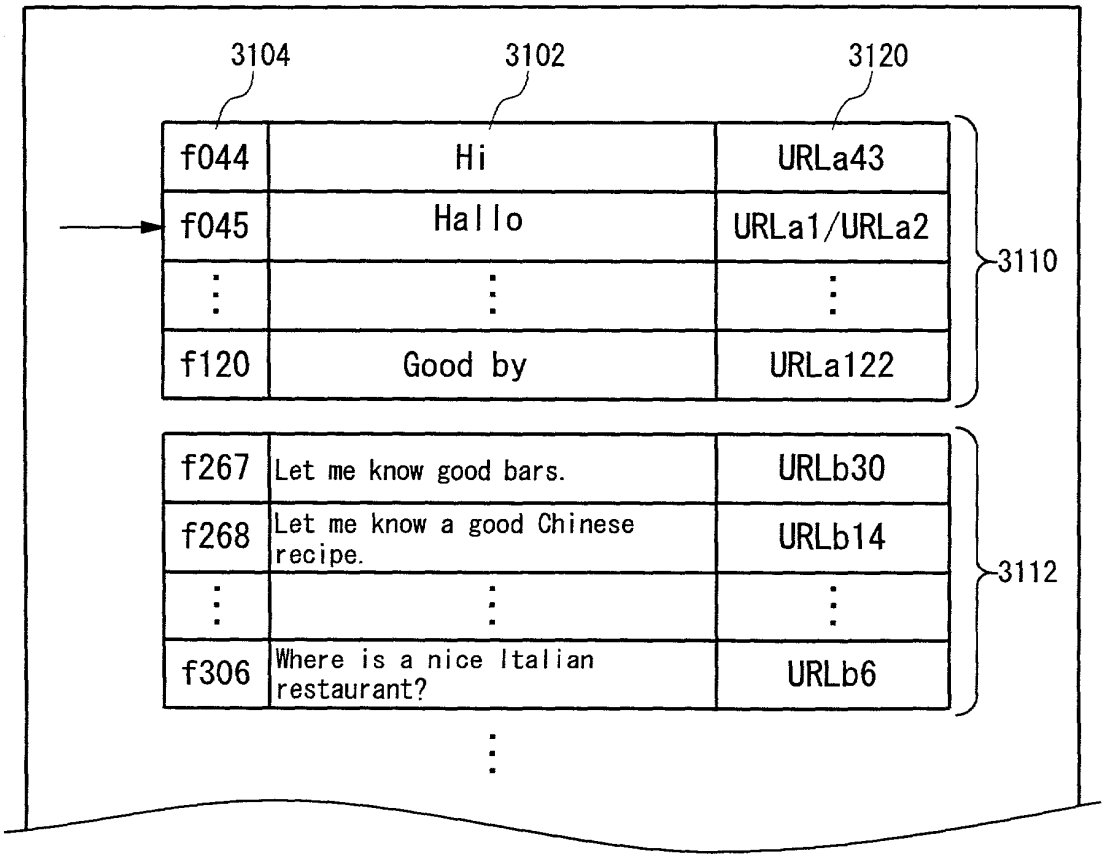
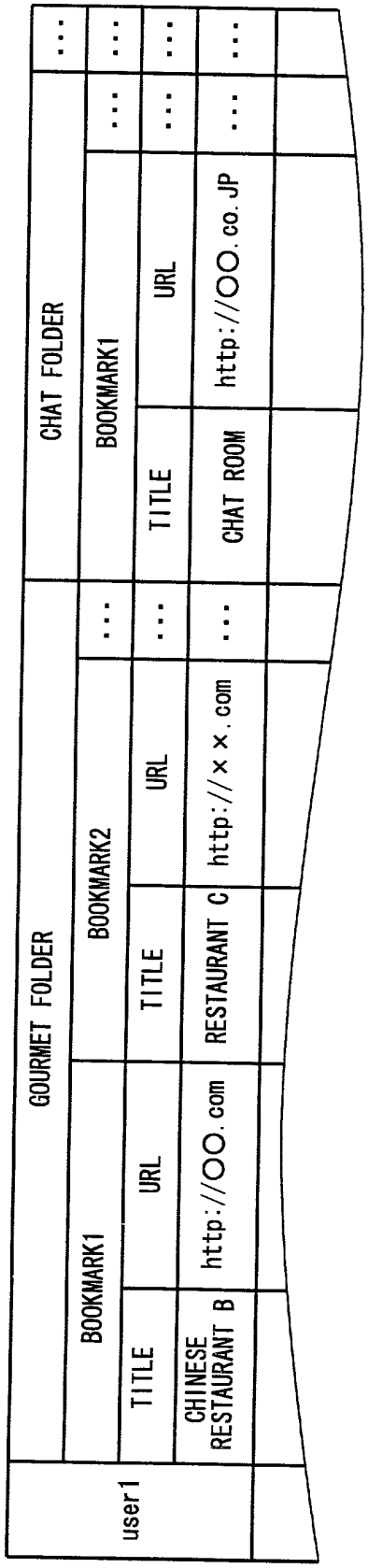

3104
3102
3120
f044
Hi
URLa43
f045
Hallo
URLa1/URLa2
f120
Good by
URLa122
3110
f267
Let me know good bars.
URLb30
f268
Let me know a good Chinese recipe.
URLb14
f306
Where is a nice Italian restaurant?
URLb6
3112
3138

FIG. 48

user1	CHAT, GOURMET, AUCTION
user2	TRAVEL, PC

3046


user1
GOURMET FOLDER
BOOKMARK1
TITLE
URL
CHINESE RESTAURANT B
http://OO.com
BOOKMARK2
TITLE
URL
RESTAURANT C
http://××.com
...
CHAT FOLDER
BOOKMARK1
TITLE
URL
CHAT ROOM
http://OO.co.JP

3054

FIG. 49

FIG. 50

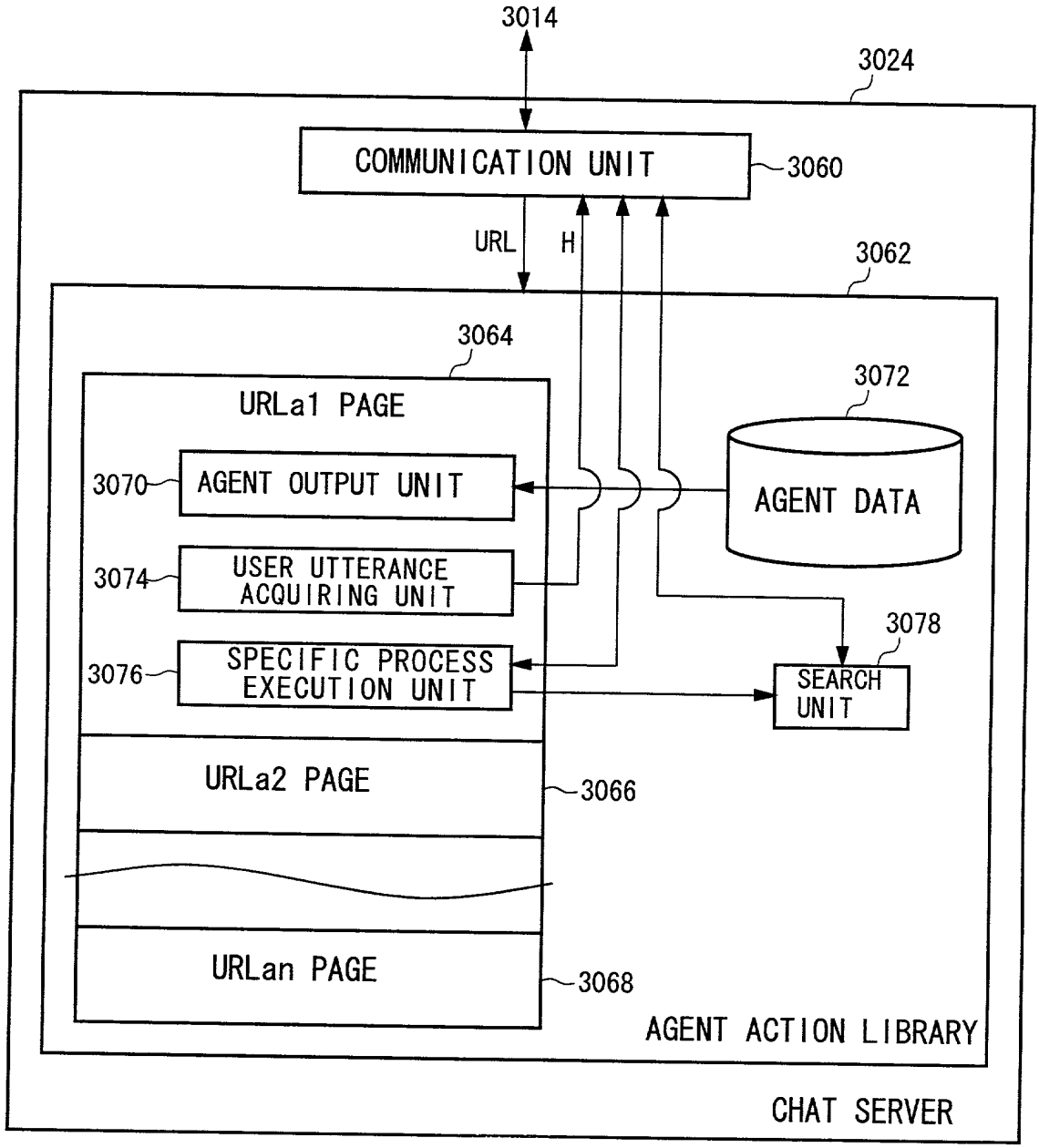

3014
3024
COMMUNICATION UNIT
3060
URL
H
3062
3064
URLa1 PAGE
3072
AGENT DATA
3070
AGENT OUTPUT UNIT
3074
USER UTTERANCE ACQUIRING UNIT
3078
3076
SPECIFIC PROCESS EXECUTION UNIT
SEARCH UNIT
URLa2 PAGE
3066
URLan PAGE
3068
AGENT ACTION LIBRARY
CHAT SERVER

FIG. 51

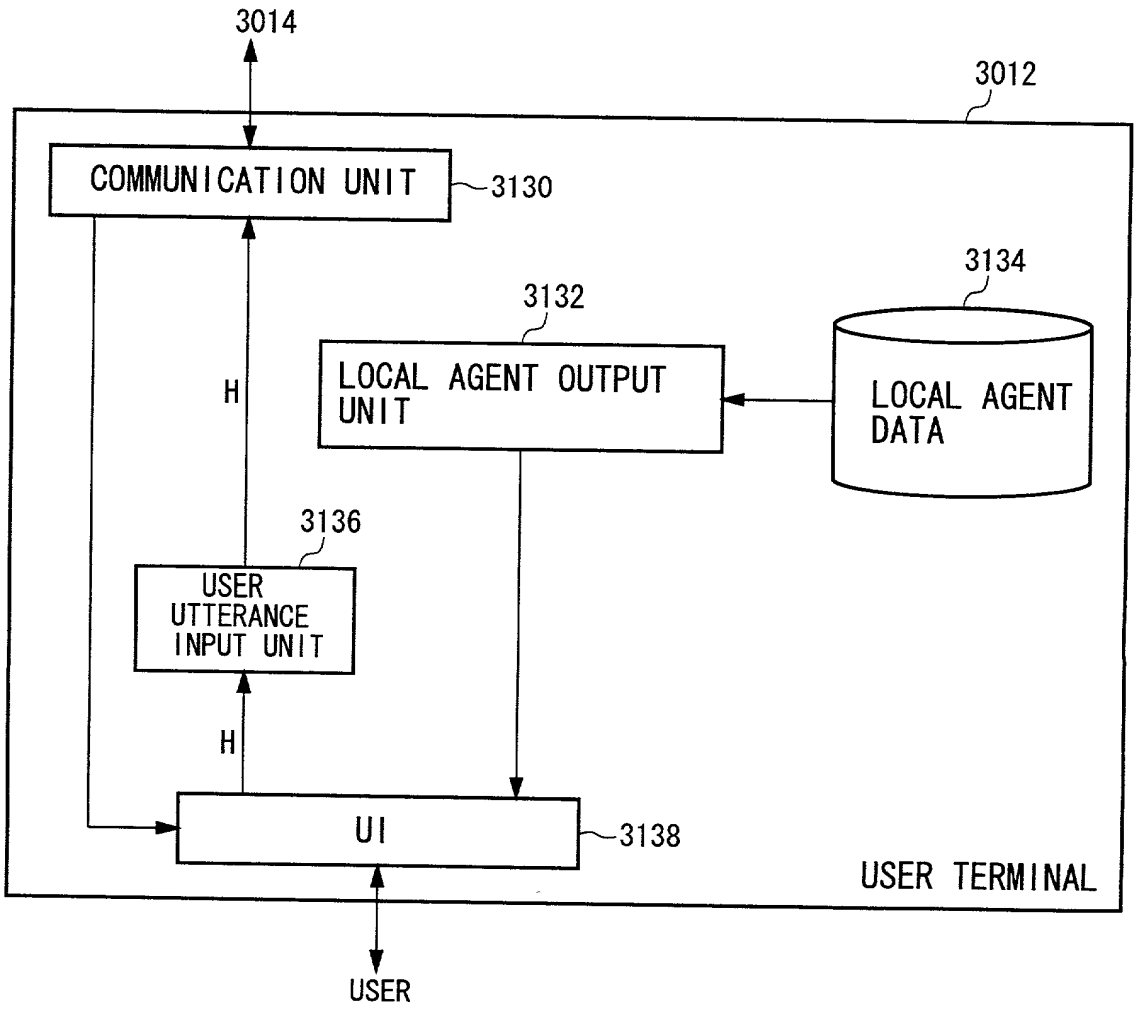

3014
3012
COMMUNICATION UNIT
3130
3134
3132
LOCAL AGENT OUTPUT UNIT
LOCAL AGENT DATA
H
3136
USER UTTERANCE INPUT UNIT
H
UI
3138
USER TERMINAL
USER

FIG. 52

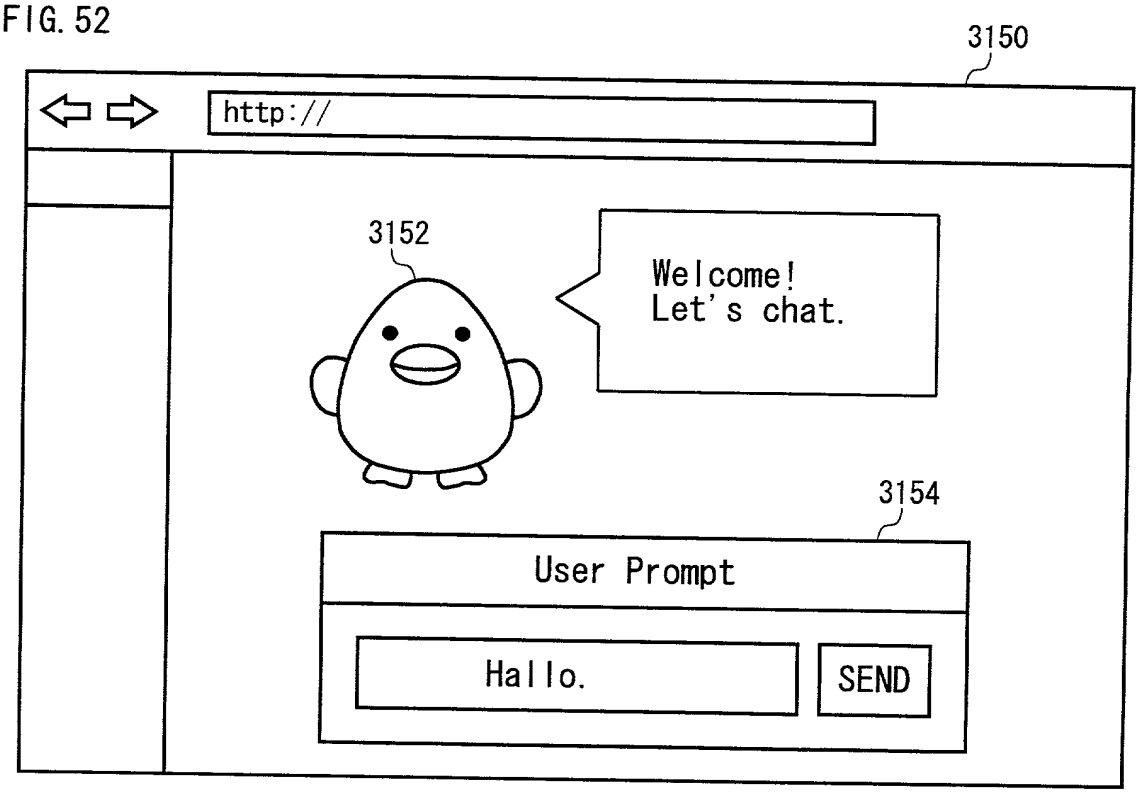

3150
http://
3152
Welcome!
Let's chat.
3154
User Prompt
Hallo.
SEND

FIG. 53

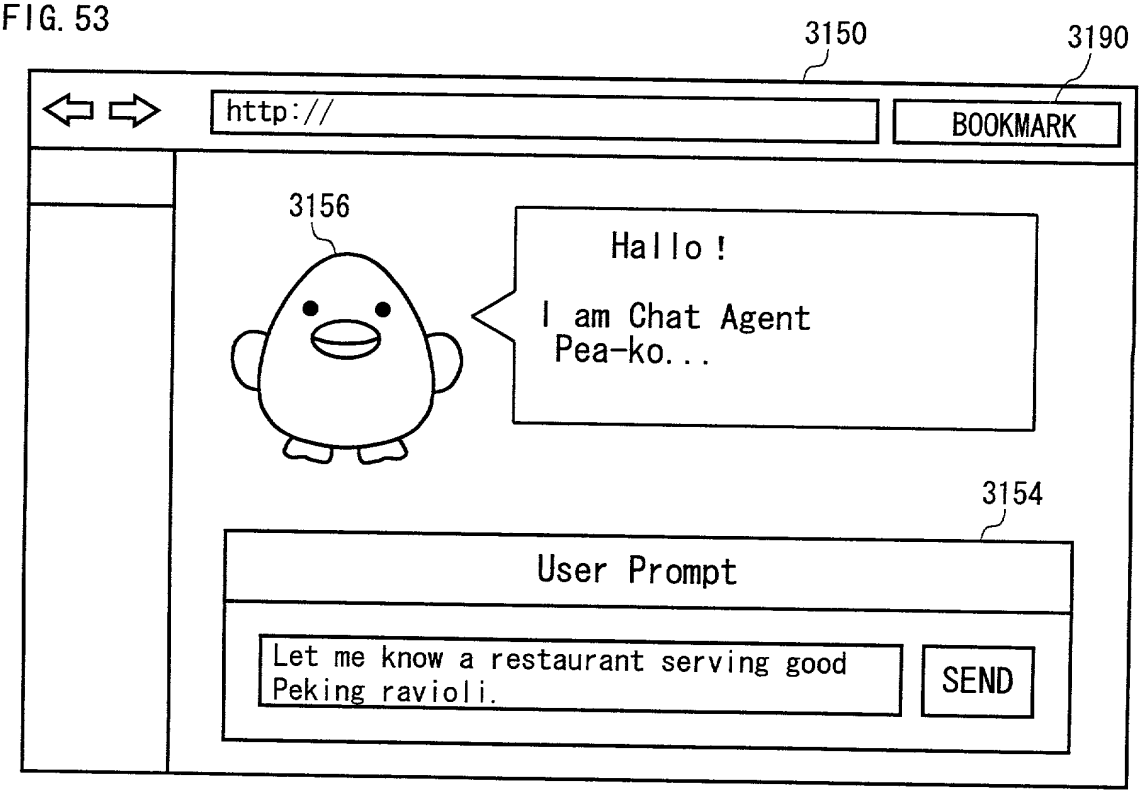

3150
3190
http://
BOOKMARK
3156
Hallo!
I am Chat Agent
Pea-ko...
3154
User Prompt
Let me know a restaurant serving good Peking ravioli.
SEND

FIG. 54

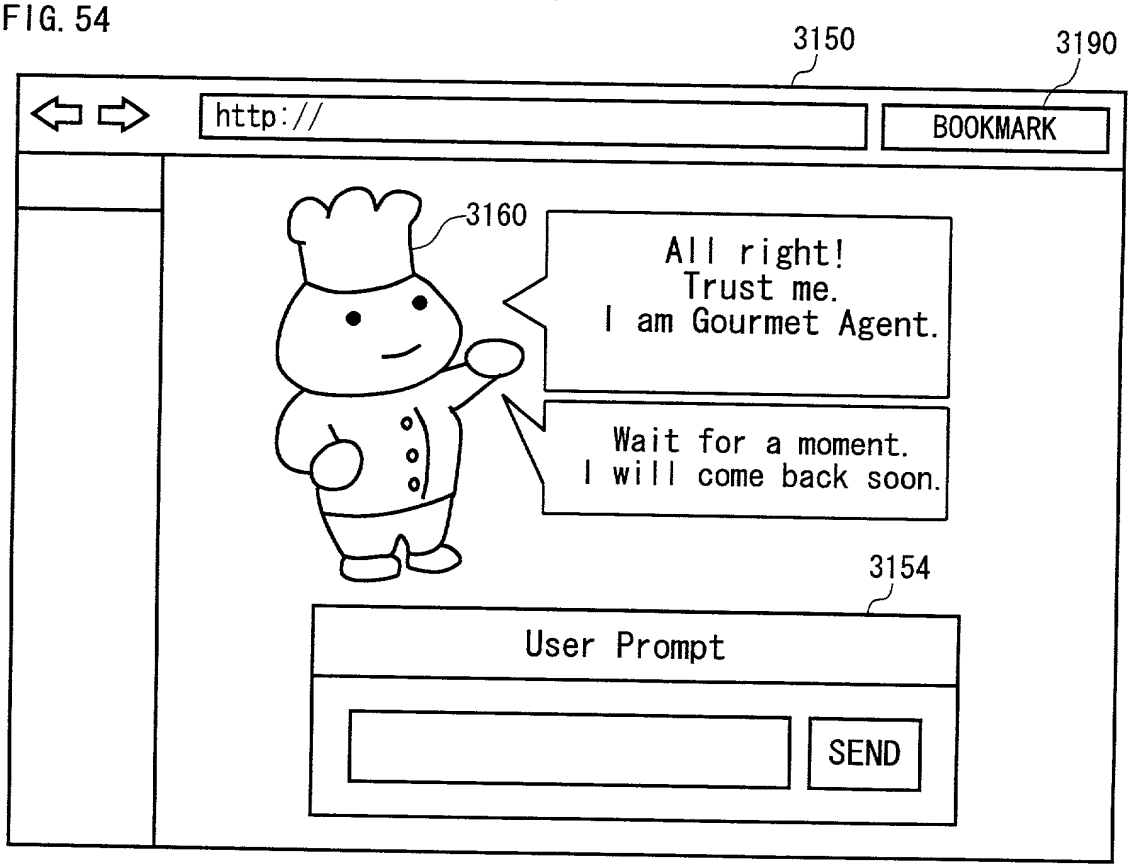

3150
3190
http://
BOOKMARK
3160
All right!
Trust me.
I am Gourmet Agent.
Wait for a moment.
I will come back soon.
3154
User Prompt
SEND

FIG. 55

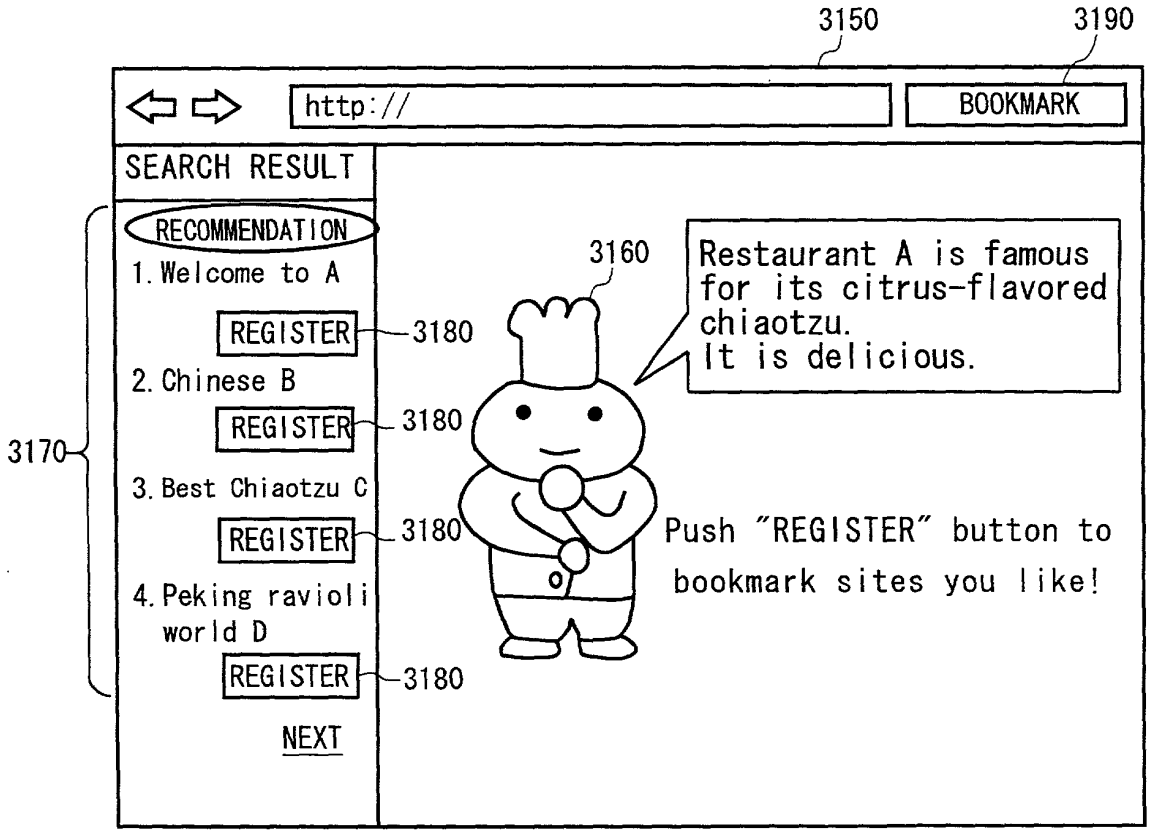

3150
3190
http://
BOOKMARK
SEARCH RESULT
RECOMMENDATION
1. Welcome to A
REGISTER
3180
2. Chinese B
REGISTER
3180
3. Best Chiaotzu C
REGISTER
3180
4. Peking ravioli world D
REGISTER
3180
NEXT
3170
3160
Restaurant A is famous for its citrus-flavored chiaotzu.
It is delicious.
Push "REGISTER" button to bookmark sites you like!

FIG. 56

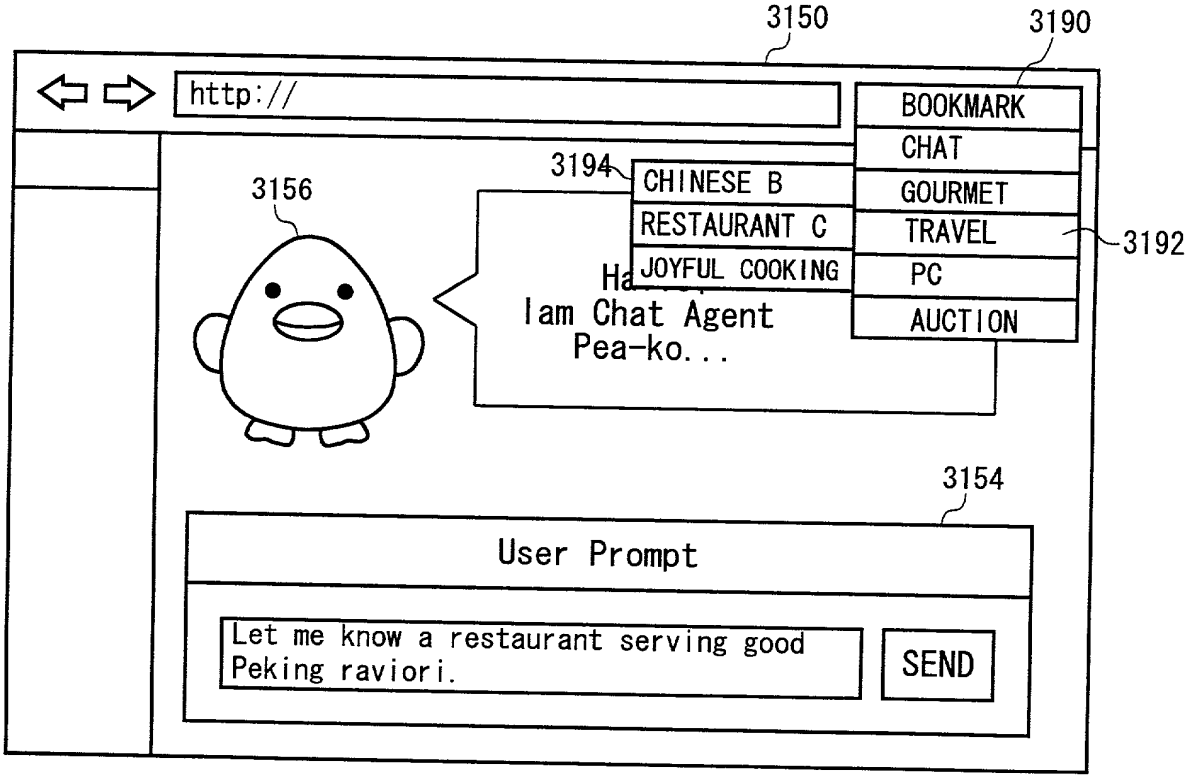

3150
3190
http://
BOOKMARK
CHAT
GOURMET
TRAVEL
PC
AUCTION
3192
3194
CHINESE B
RESTAURANT C
JOYFUL COOKING
3156
Ha
Iam Chat Agent
Pea-ko...
3154
User Prompt
Let me know a restaurant serving good Peking raviori.
SEND

FIG. 57

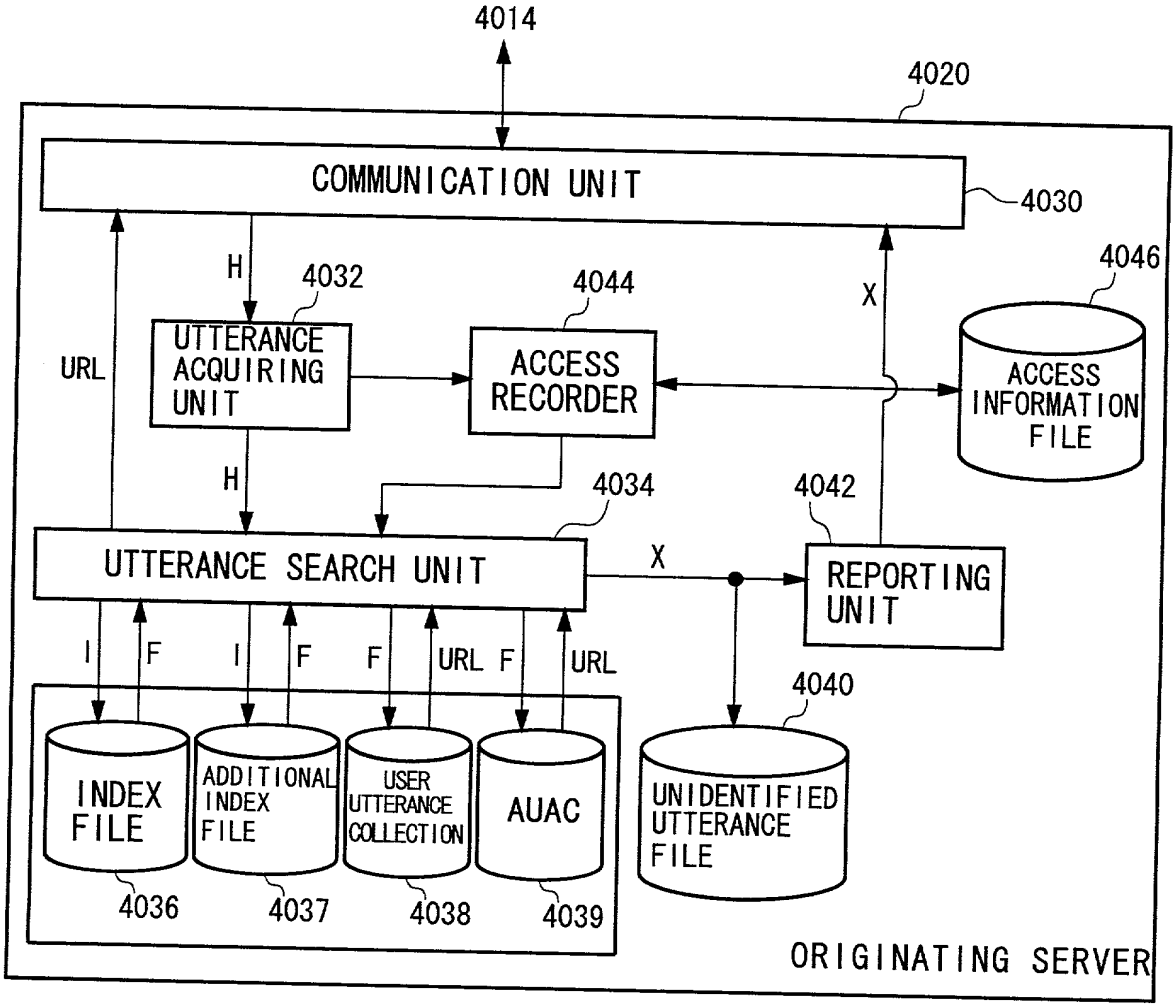

4014
4020
COMMUNICATION UNIT
4030
H
4032
UTTERANCE ACQUIRING UNIT
URL
4044
ACCESS RECORDER
X
4046
ACCESS INFORMATION FILE
H
4034
UTTERANCE SEARCH UNIT
4042
X
REPORTING UNIT
I
F
I
F
F
URL
F
URL
4040
INDEX FILE
ADDITIONAL INDEX FILE
USER UTTERANCE COLLECTION
AUAC
UNIDENTIFIED UTTERANCE FILE
4036
4037
4038
4039
ORIGINATING SERVER

FIG. 58

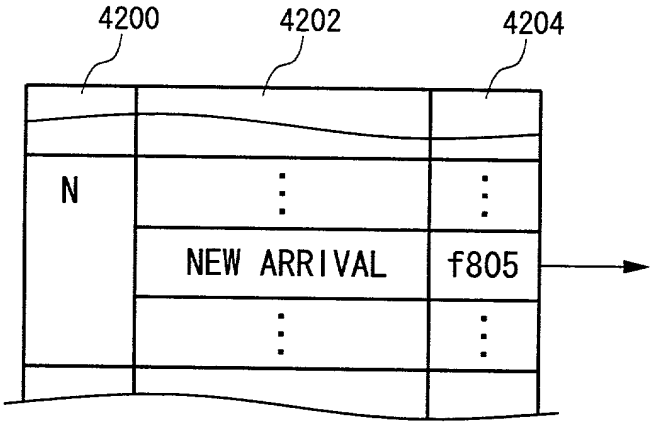


FIG. 59

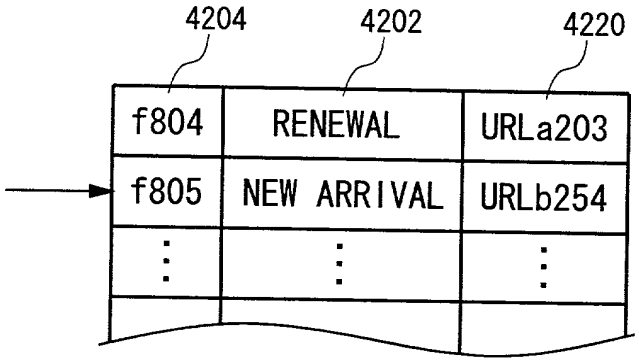
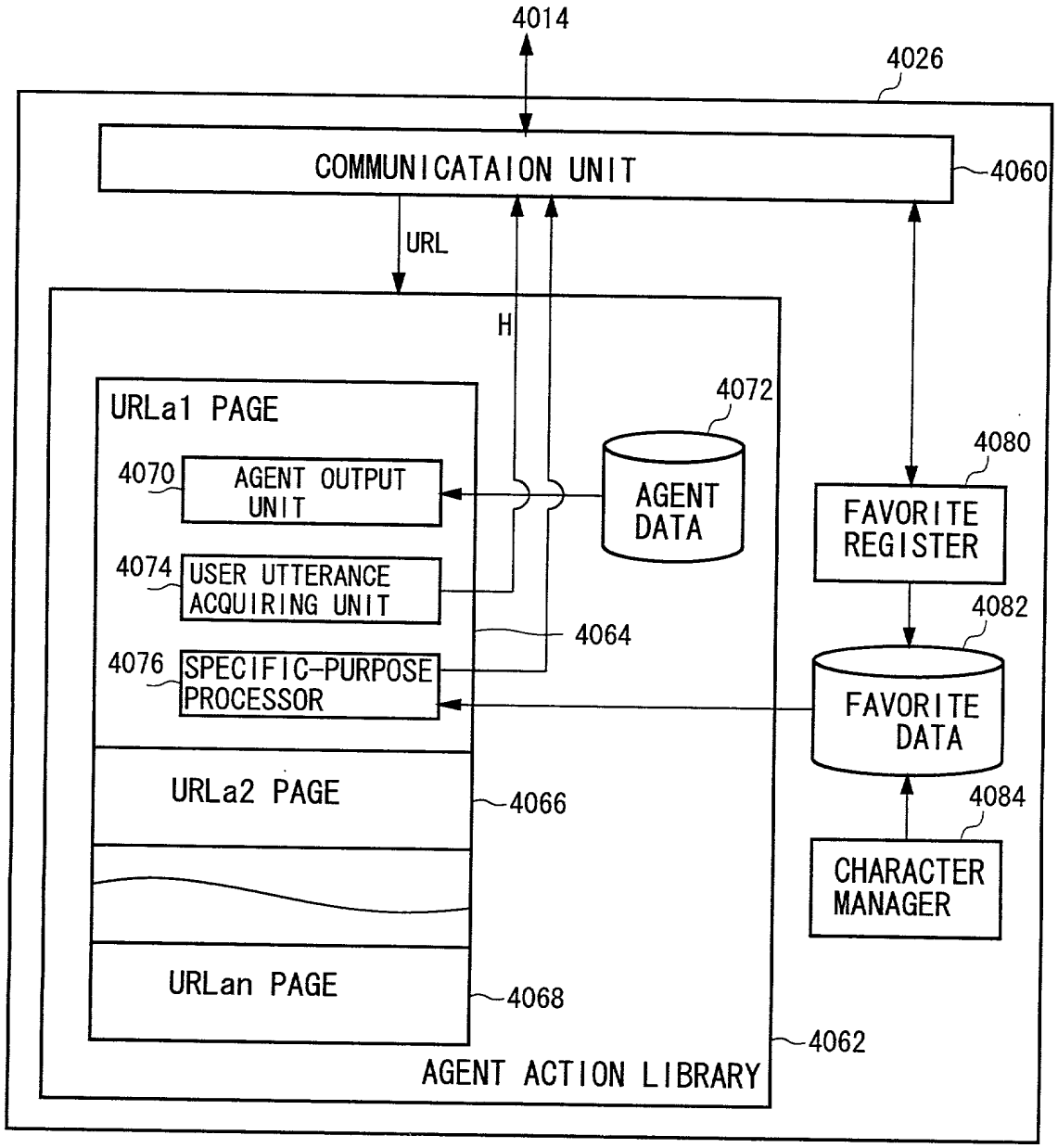

4204
4202
4220
f804
RENEWAL
URLa203
f805
NEW ARRIVAL
URLb254

FIG. 60


4014
4026
COMMUNICATAION UNIT
4060
URL
H
URLa1 PAGE
4072
4080
4070
AGENT OUTPUT UNIT
AGENT DATA
FAVORITE REGISTER
4074
USER UTTERANCE ACQUIRING UNIT
4082
4064
4076
SPECIFIC-PURPOSE PROCESSOR
FAVORITE DATA
URLa2 PAGE
4066
4084
CHARACTER MANAGER
URLan PAGE
4068
4062
AGENT ACTION LIBRARY

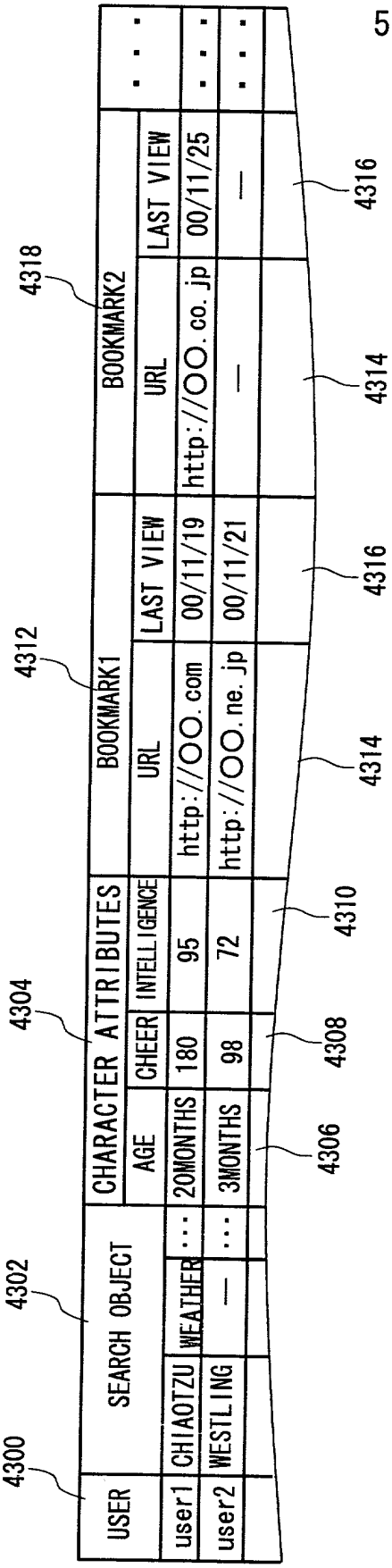

4300
4302
4304
4306
4308
4310
4312
4314
4316
4318
USER
SEARCH OBJECT
CHARACTER ATTRIBUTES
AGE
CHEER
INTELLIGENCE
BOOKMARK1
URL
LAST VIEW
BOOKMARK2
URL
LAST VIEW
user1
CHIAOTZU
WEATHER
20MONTHS
180
95
http://OO.com
00/11/19
http://OO.co.jp
00/11/25
user2
WESTLING
—
3MONTHS
98
72
http://OO.ne.jp
00/11/21
—
—
4082

FIG. 61

FIG. 62

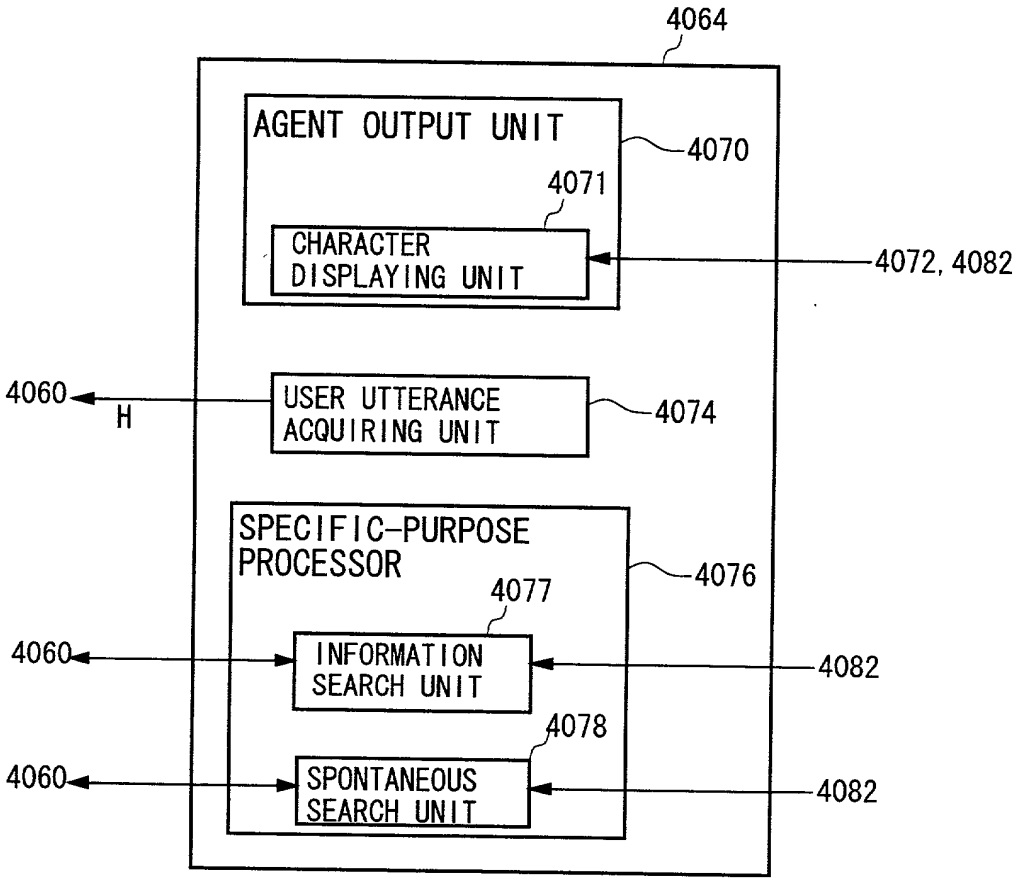

4064
AGENT OUTPUT UNIT
4070
4071
CHARACTER DISPLAYING UNIT
4072, 4082
4060
H
USER UTTERANCE ACQUIRING UNIT
4074
SPECIFIC-PURPOSE PROCESSOR
4076
4077
4060
INFORMATION SEARCH UNIT
4082
4078
4060
SPONTANEOUS SEARCH UNIT
4082

FIG. 63

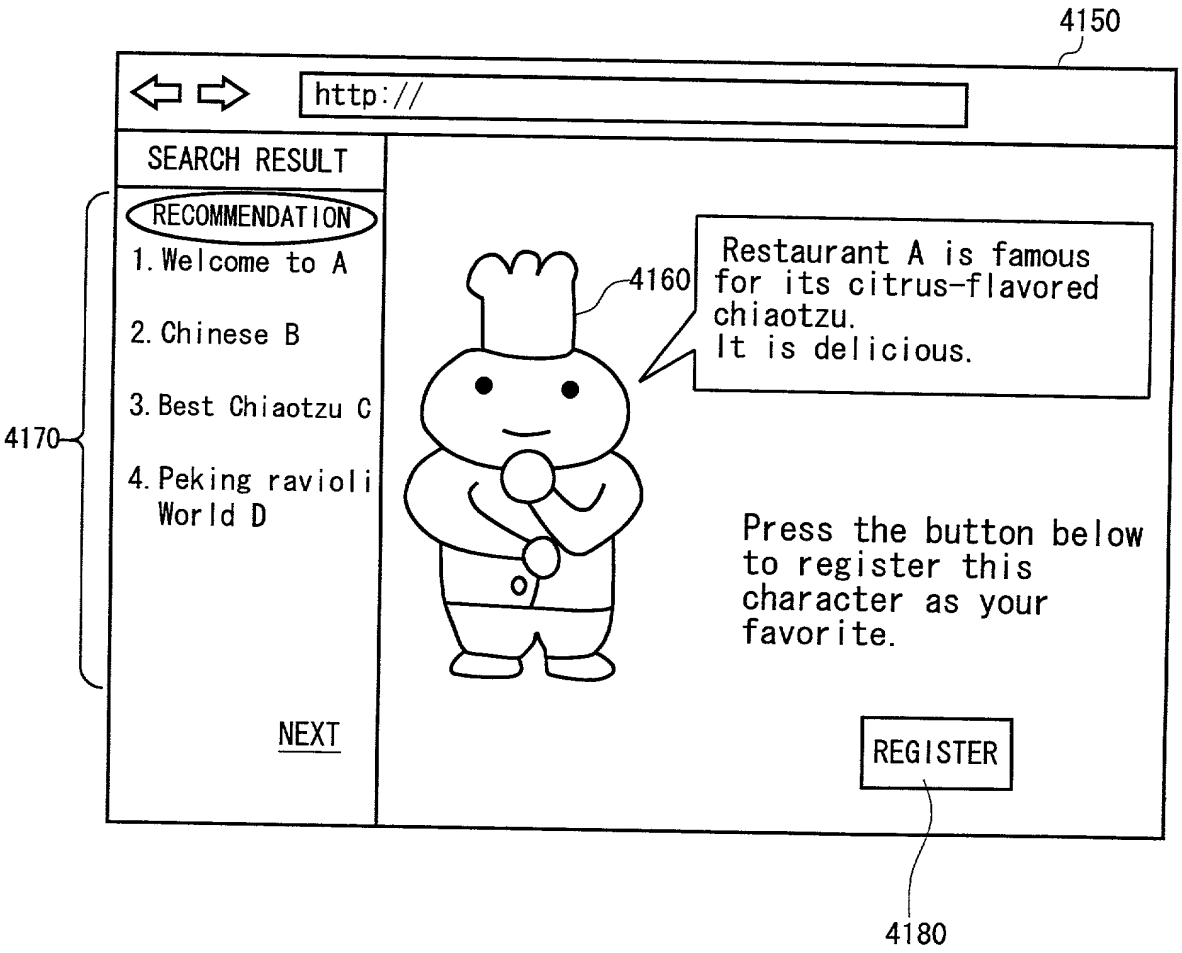

4150
http://
SEARCH RESULT
RECOMMENDATION
1. Welcome to A
2. Chinese B
3. Best Chiaotzu C
4. Peking ravioli World D
NEXT
4170
4160
Restaurant A is famous for its citrus-flavored chiaotzu.
It is delicious.
Press the button below to register this character as your favorite.
REGISTER
4180

FIG. 64

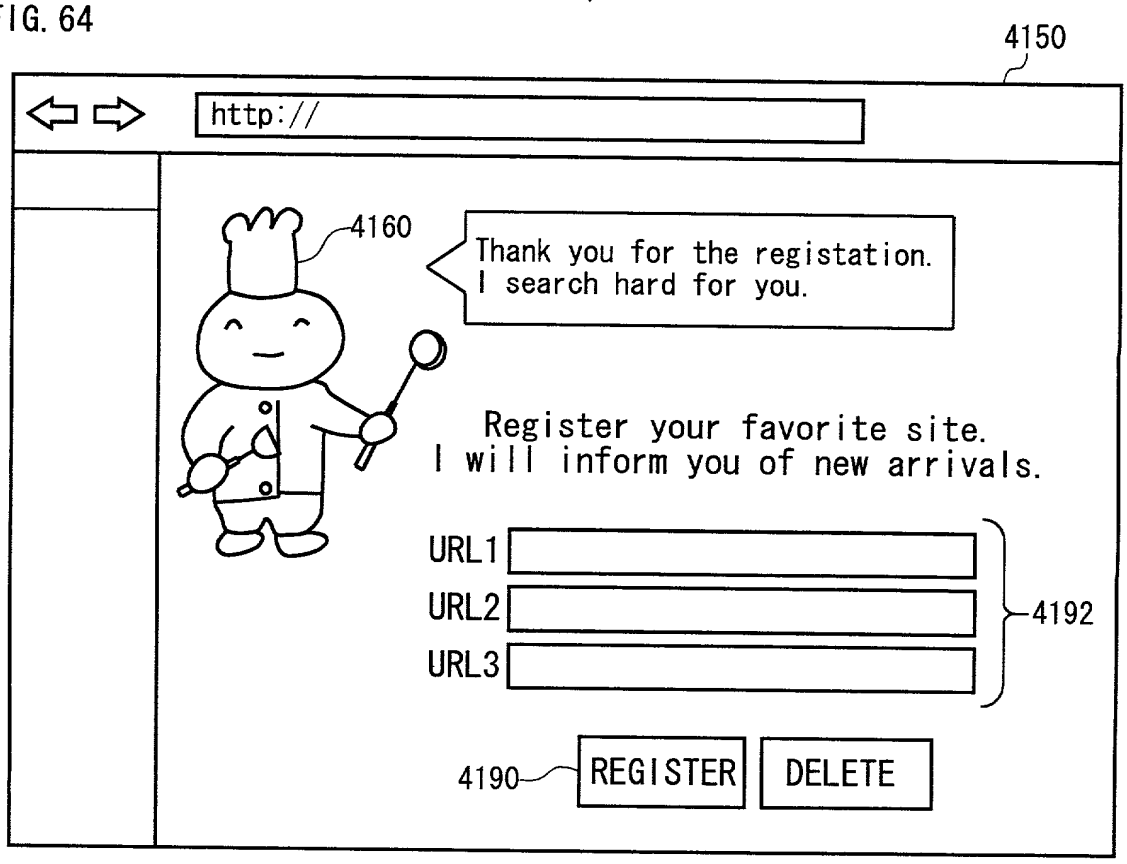

4150
http://
4160
Thank you for the registation.
I search hard for you.
Register your favorite site.
I will inform you of new arrivals.
URL1
URL2
URL3
4192
4190
REGISTER
DELETE

FIG. 65

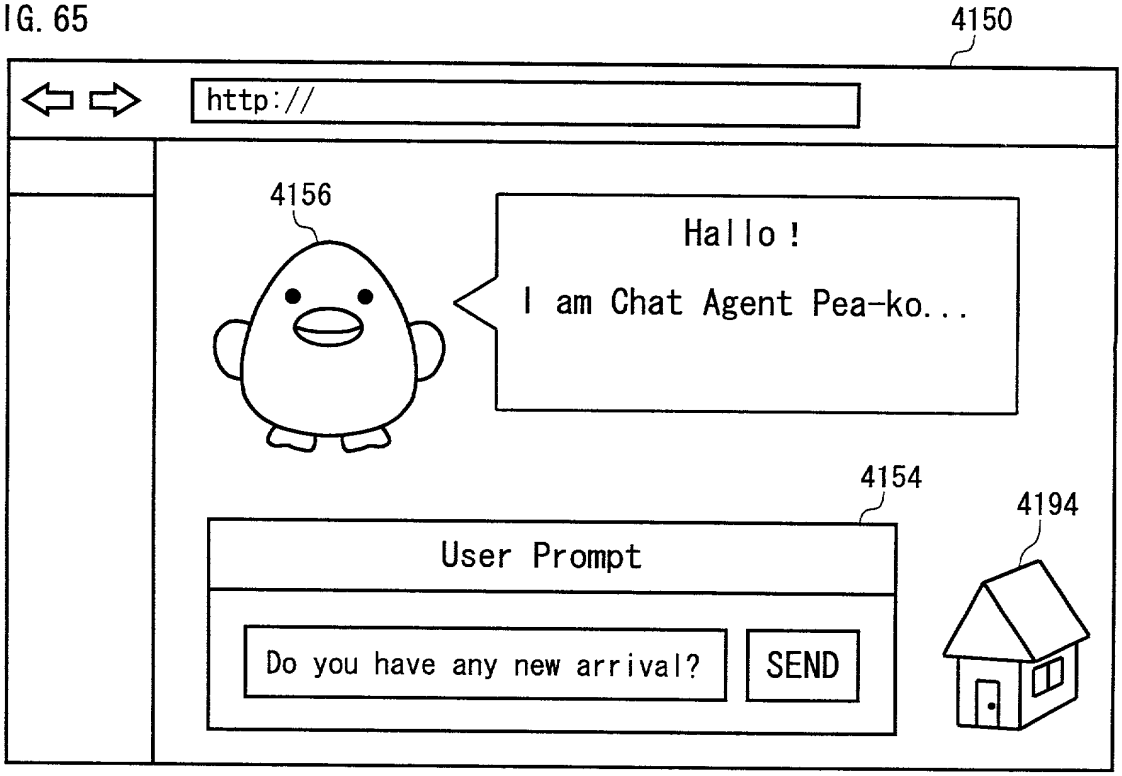
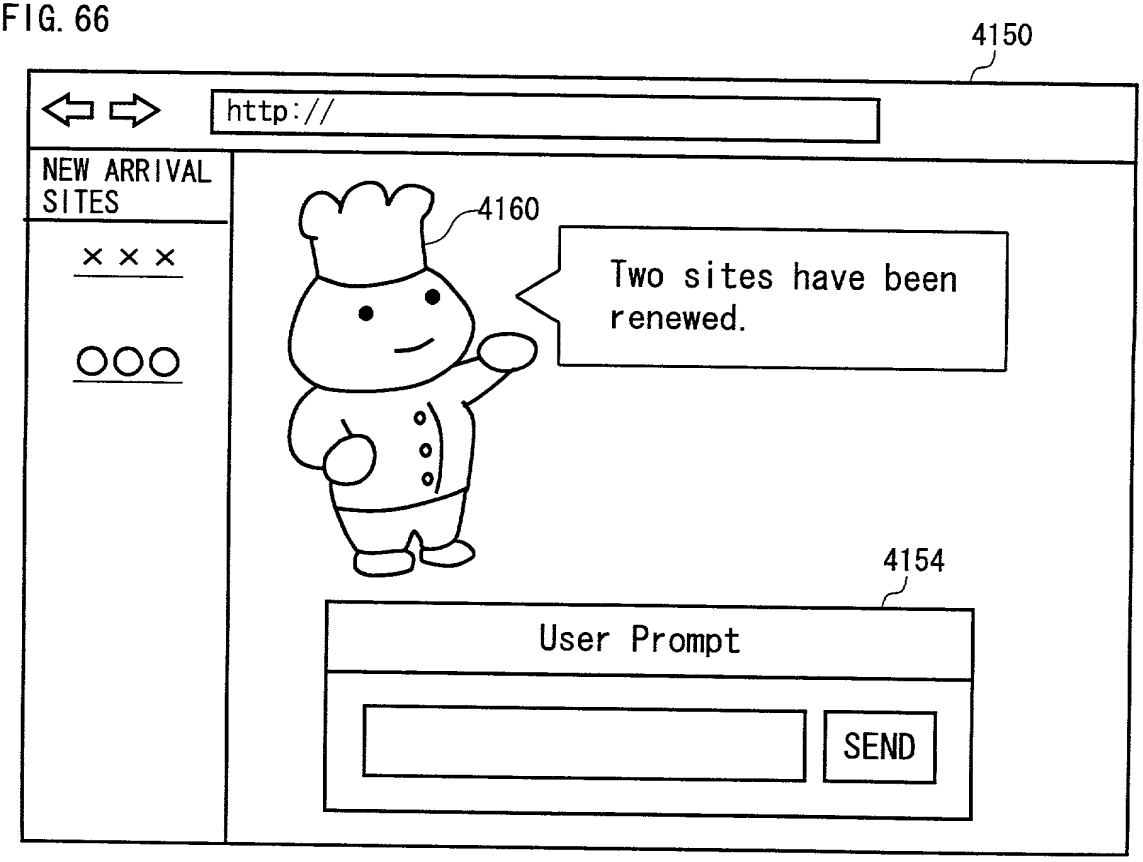

4150
http://
4156
Hallo!
I am Chat Agent Pea-ko...
4154
4194
User Prompt
Do you have any new arrival?
SEND

FIG. 66


4150
http://
NEW ARRIVAL SITES
× × ×
○○○
4160
Two sites have been renewed.
4154
User Prompt
SEND